National Grid

The Narragansett Electric Company

FY 2017 Electric Infrastructure, Safety and Reliability Plan

Annual Reconciliation

August 1, 2017

Docket No. 4592

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

Filing Letter

nationalgrid

Raquel J. Webster
Senior Counsel

August 1, 2017

BY HAND DELIVERY AND ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4592 - Fiscal Year 2017 Electric Infrastructure, Safety, and Reliability Plan Reconciliation Filing

Dear Ms. Massaro:

On behalf of National Grid,[1] relating to the Company's Fiscal Year (FY) 2017 Electric Infrastructure, Safety, and Reliability (ISR) Plan, I have enclosed ten (10) copies of the Company's Electric ISR Reconciliation Filing. Pursuant to the approved ISR Plan and the ISR Provision, RIPUC No. 2188, after the end of the ISR Plan year, which runs from April 1 through March 31, the Company must file annually, by August 1 of each year, the proposed CapEx Reconciling Factors and O&M Reconciling Factor that will become effective for the 12 months beginning October 1. The CapEx Reconciling Factors recover or refund the difference between the reconciliation of actual billed revenue generated from the CapEx Factors and the actual Cumulative Revenue Requirement for the applicable plan year. Similarly, the annual O&M Reconciling Factor recovers or refunds the difference between the reconciliation of actual billed revenue from the O&M Factor and actual Inspection and Maintenance (I&M) program expense and actual Vegetation Management (VM) program expense for the ISR Plan year. Additionally, on August 1, the Company must report on the prior fiscal year's ISR Plan activities and include descriptions of deviations from the original plans approved by the Rhode Island Public Utilities Commission (PUC).

This filing provides the actual discretionary and non-discretionary capital investment spending and the actual Vegetation Management (VM) and Inspection and Maintenance (I&M) expenses for the period April 1, 2016 to March 31, 2017. As explained in this filing, the actual capital plant-in-service is compared to the budgeted amounts for these categories, as approved by the PUC in Order No. 21559. The plant-in-service investment and Operation and Maintenance (O&M) expenses for VM and I&M are then used in the calculation of the revenue requirement for the annual reconciliation of investment and expenses for the fiscal year. This revenue requirement is then compared to actual revenue billed, and any difference forms the basis for the proposed

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

40 Sylvan Road, Waltham, MA 02451
T: 781-907-2121 ■ raquel.webster@nationalgrid.com ■www.nationalgrid.com

Electric ISR Plan reconciliation factors for effect October 1, 2017. This filing also includes details on the Company's actual discretionary and non-discretionary capital investment spending by category during FY 2017. Finally, this filing includes a summary of the Company's Reliability Performance through December 31, 2016.

The pre-filed direct testimonies of Prabhjot S. Anand, Aidimarys Martinez, and Adam Crary are enclosed with this filing. Mr. Anand presents the Company's FY 2017 Electric ISR Plan Reconciliation Filing related to the FY 2017 Electric ISR Plan, which the PUC approved in this docket. Ms. Martinez's testimony describes the calculation of the revenue requirement based on the capital plant-in-service and the total annual actual VM and I&M expenses for the fiscal year. Ms. Martinez's testimony also includes a description of the revenue requirement model and attachments that support the final revenue requirement. As explained in Ms. Martinez's testimony, for the FY 2017 Electric ISR reconciliation, the Company has an updated revenue requirement of $19.8 million. Mr. Crary describes the reconciliation of the final actual FY 2017 revenue requirement against revenue billed in support of that revenue requirement, the proposed factors resulting from the reconciliation, and the bill impacts of those proposed factors. The impact of the proposed CapEx Reconciling Factor and the proposed O&M Reconciling Factor on a typical residential customer receiving Standard Offer Service and using 500 kWhs per month is an decrease of $0.58 per month, or approximately 0.7%, from $89.06 to $88.48 per month.

Thank you for your attention to this filing. If you have any questions, please contact me at 781-907-2121.

Very truly yours,

Raquel J. Webster

Enclosures

cc: Docket 4592 Service List
LeoWold, Esq.
Steve Scialabba, Division
Al Contente, Division

Testimony of
Prabhjot S. Anand

PRE-FILED DIRECT TESTIMONY

OF

PRABHJOT S. ANAND

August 1, 2017

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. Mr. Anand, please state your name and business address.

A. My name is Prabhjot S. Anand. My business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. Mr. Anand, by whom are you employed and in what position?

A. I am employed by National Grid USA Service Company, Inc. (Service Company) as Director, Strategy and Performance - Electric, New England. I am responsible for regulatory filings and regulatory compliance related to the electric distribution operation of The Narragansett Electric Company d/b/a National Grid (the Company or National Grid). I am also responsible filings relating to National Grid USA's electric distribution operations in Massachusetts.

Q. Mr. Anand, please describe your educational background and professional experience.

A. In 1993, I graduated from Worcester Polytechnic Institute with a Bachelor of Science Degree in Electrical Engineering. In the same year, I was employed by Massachusetts Electric as an Associate Operations Engineer responsible for the design of new distribution facilities for business and capital improvement projects. From 1997 to 2004, I held various roles that involved increasing electric system responsibility relating to the design, implementation, construction and management of sub-transmission and distribution system projects. In 2004, I received a Master of Science degree in Power Systems Management from Worcester

Polytechnic Institute. In 2004, I was the Manager of Operations Planning and Schedule with responsibility for the development and coordination of a regional capital, storm, emergency, and business continuity work plans. From 2008 thru 2017, I held various positions and was responsible for the management of complex permitting/high profile projects within the electric transmission and distribution business in New England and upstate New York. I assumed my current position in February 2017.

Q. Have you previously testified before the Rhode Island Public Utilities Commission (PUC)?

A. No. However, in my previous positions, I have provided operational support for the negotiations with the Rhode Island Division of Public Utilities and Carriers (Division), including Electric Infrastructure, Safety and Reliability (ISR) Plan filings.

II. <u>PURPOSE OF TESTIMONY</u>

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the Company's Fiscal Year 2017 (FY 2017) Annual Reconciliation filing related to the FY 2017 Electric ISR Plan approved by the PUC in this docket. This filing provides the actual plant-in-service for discretionary and non-discretionary capital investment and associated cost of removal (COR)[1], the actual vegetation management (VM) operation and maintenance (O&M) expenses, and the actual inspection and maintenance (I&M) O&M expenses for the period April 1, 2016 to March 31, 2017. As described in Ms. Aidimarys Martinezs testimony in this filing, this plant-in-service investment and the O&M expenses for VM and I&M is used to calculate the FY 2017 Electric ISR Plan revenue requirement. As explained in Mr. Adam Crary's testimony in this filing, the revenue requirement is then reconciled against the actual revenue billed during FY 2017. Specific details by category for the FY 2017 Electric ISR Plan plant-in-service additions, associated COR, and actual capital spending are included in Attachment PSA-1, which is attached to this testimony.

III. PLANT-IN-SERVICE

Q. Please provide an overview of the plant-in-service for FY 2017.

A. As shown in Table 1 of Attachment PSA-1, in FY 2017, the Company's plant-in-service investment was \$75.5 million. This amount was approximately \$3.0 million under the planned amount of \$78.5 million. The Non-Discretionary Sub-category had \$28.6 million of plant additions placed in service, which was approximately \$2.8 million under the planned amount of \$31.4 million. The Discretionary Sub-category had \$46.9 million of plant additions placed in service, which was approximately \$0.2 million under the

[1] Under the Electric ISR Plan, discretionary capital investment for a fiscal year must be reconciled to the lesser of the actual capital investment placed-in-service and the level of approved spending on a cumulative basis. Non-discretionary capital investment for a fiscal year must be reconciled to the actual capital investment placed-in-service. Docket No. 4218, Report and Order No. 20852 at 6 (December 12, 2011).

planned amount of $47.1 million. As shown in Table 2 of Attachment PSA-1, in FY 2017, the associated cost of removal (COR) was $7.8 million which was under budget by approximately $2.0 million from the FY 2017 forecast of $9.8 million. These totals resulted in a net Electric ISR Plan investment of $83.3 million, which was approximately $5.0 million under the Company's plant-in-service and COR combined planned amount of $88.3 million. Details on these variances are included in Section I of Attachment PSA-1.

IV. CAPITAL SPENDING

Q. Please summarize the Company's actual capital spending for FY 2016 for the Electric ISR Plan.

A. As shown in Table 3 of Attachment PSA-1, for FY 2017, the Company spent $84.1 million for capital investment under the Electric ISR Plan. This amount was $0.7 million over the annual approved budget of $83.4 million. This over-budget variance was driven primarily by capital spending in the Non-Discretionary Sub-category, which was over-budget by $4.9 million. Within this sub-category, the Damage Failure category was over-budget by $4.1 million. This over-budget variance was due partially to the replacement of the failed Valley 102 Substation 22T transformer project, costs captured under the Storm Capital Confirming program, along with over-budget spending on Damage/Failure blanket.

Capital spending on the Discretionary Sub-category (excluding South Street) was $33.2 million, which was $4.0 million under the annual approved budget of $37.2 million. This was driven primarily by an under-budget variance of $2.3 million in the Asset Condition category due partially lower than anticipated spending in the Asset Replacement blanket. Also, the System Capacity & Performance category was under-budget by $2.0 million due partially to the deferral of New London Avenue project and delays in securing rights and permitting on the Aquidneck Island projects. Capital spending on the South Street project, which was managed as a separate Discretionary Sub-category, was $15.1 million, which was $0.3 million under the annual approved budget of $15.4 million.

The key drivers and variances by category are discussed in detail in <u>Section III</u> of Attachment PSA-1.

V. <u>O&M SPENDING</u>

Q. Please summarize the Company's actual O&M spending for the FY 2016 Electric ISR Plan.

A. As shown in <u>Table 11</u> of Attachment PSA-1, for FY 2017, the Company's VM O&M spending was on budget at $8.7 million. In addition, as shown in <u>Table 12</u>, the Company's I&M O&M spending for FY 2017 was $0.9 million, which was approximately $0.4 million under the I&M annual approved budget of $1.3 million.

Detailed information regarding the VM and I&M variances, along with the work completed, are discussed in Attachment PSA-1 in Sections IV and V, respectively.

VI. RELIABILITY PERFORMANCE

Q. Please summarize the results of the Company's reliability performance for FY 2016.

A. Section VI of Attachment PSA-1 includes the Company's Reliability Performance for calendar year 2016 (CY 2016). As shown in Table 13, the Company met both its System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) performance metrics in CY 2016, with SAIFI of 0.97 against a target of 1.05, and SAIDI of 69.13 minutes against a target of 71.9 minutes. Overall, the Company's performance has shown an improving downward trend over the past several years with major event days excluded. As shown in Table 14, for CY 2016, the Company had four days that was characterized as a major event day. Reliability performance, including major event days, is shown in Table 15.

Q. Does this conclude your testimony?

A. Yes.

Attachment PSA-1

Attachment PSA-1

FY 2016 Electric Infrastructure, Safety and Reliability Plan Annual Reconciliation Filing

FY 2017 Electric Infrastructure, Safety and Reliability Plan

Annual Reconciliation Filing

EXECUTIVE SUMMARY

In accordance with tariff, RIPUC No. 2044, Sheets 1- 4, the Company[1] submits this annual reconciliation filing for the fiscal year 2017 (FY 2017) Electric Infrastructure, Safety and Reliability (Electric ISR) Plan, which the Rhode Island Public Utilities Commission (RIPUC) approved in Docket No. 4592. This filing provides the actual discretionary and non-discretionary capital investment spending and the actual vegetation management (VM) and inspection and maintenance (I&M) operation and maintenance (O&M) expenses for the period April 1, 2016 to March 31, 2017. As explained in this filing, the actual capital plant-in-service is compared to the planned amounts for these categories, as approved by the RIPUC in Order No. 22174. The capital plant-in-service investment and O&M expenses for VM and I&M are then used to calculate the revenue requirement for the annual reconciliation of investment and expenses for the fiscal year. This revenue requirement is then compared to actual revenue billed, and any difference forms the basis for the proposed Electric ISR Plan reconciliation factors for effect October 1, 2017. This filing also includes details on the Company's actual discretionary and non-discretionary capital spending by category in FY 2017. Finally, this filing includes a summary of the Company's reliability performance through December 31, 2016.

For FY 2017, the Company's plant-in-service investment was $75.5 million, which was approximately $3.0 million under the planned amount of $78.5 million. The associated cost of removal (COR) was $7.8 million, which was approximately $2 million below the FY 17 forecast of $9.8 million. These totals resulted in a net Electric ISR Plan investment of $83.3 million, which was approximately $5.0 million under the Company's combined plant-in-service and COR planned amount of $88.3 million. Section I provides a summary overview of the actual plant placed-in-service by category compared to the annual planned amount approved in Docket No. 4592. A similar summary is provided for COR.

For FY 2017, the Company spent $84.1 million for capital investment under the Electric ISR Plan, which was approximately $0.7 million over the annual approved budget of $83.4 million. Section II provides a summary overview of the actual capital spending by category compared to the annual budget approved in Docket No. 4592. Section III provides detailed explanations of capital spending variances by category to the annual approved budget.

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

For FY 2017, the Company's VM O&M spending was on budget at $8.7 million. Section IV provides a summary overview of O&M expenses by VM sub-category along with variance explanations.

For FY 2017, the Company's I&M O&M spending was $0.9 million, which was approximately $0.41 million under the I&M annual approved budget of $1.3 million. Section V provides a summary overview of O&M expenses by I&M sub-category along with variance explanations.

Finally, a summary of the Company's reliability performance through December 31, 2016 is addressed in Section VI.

This filing includes testimony from Ms. Aidimarys Martinez and Mr. Adam Crary. Ms. Martinez's testimony describes the calculation of the revenue requirement based on the capital plant-in-service and the total annual actual VM and I&M O&M expenses for the fiscal year. Ms. Martinez's testimony also includes a description of the revenue requirement model and attachments that support the final revenue requirement. For the FY 2017 filing, the Company has an updated revenue requirement of $19.7 million, which was a $7.9 million decrease in the FY 2017 revenue requirement of $27.7 million.

Mr. Crary's testimony provides a description of the reconciliation of the final actual FY 2017 revenue requirement against revenue billed in support of that revenue requirement, the proposed factors resulting from the reconciliation, and the bill impacts of those proposed factors. The impact of the proposed CapEx Reconciling Factor, and the proposed O&M Reconciling Factor on a typical residential customer receiving Standard Offer Service and using 500 kWhs per month is a decrease of $0.58 per month, or approximately 0.7%, from $89.06 to $88.48 per month.

I. FY 2017 Capital for Plant Investment Placed in Service

In its reconciliation filing, the Company is required to submit the annual capital spending for plant additions that were placed in service during the fiscal year. As shown in Table 1 below, for FY 2017, approximately $75.5 million was placed in service, which was approximately $3.0 million under the annual planned amount of $78.5 million. The Non-Discretionary Sub-category had $28.6 million of plant additions placed in service, which was $2.8 million under the planned amount of $31.4 million. This variance is explained by the $5.0 million under-budget variance in the Customer Request/Public Requirement category, and $2.2 million over-budget variance in the Damage Failure category due to the Valley Street transformer replacement in FY 2017.

The Discretionary Sub-category had $46.9 million of plant additions placed in service, which was approximately $0.2 million under the planned amount of $47.1 million. This variance was due primarily to completing and placing portions of Chase Hill and Kent County substation projects in-service in the System Capacity and Performance category. Also contributing to this variance was the deferral of the Front Street and Southeast Substation metal clad retirement projects in the Asset Condition category. In addition, capital spending on the South Street project, which was a significant percentage of the Discretionary sub-category of the FY 2017 annual approved budget, will not result in asset additions until FY 2018 and beyond.

Table 1

FY 2017 Plant Additions by Category

	FY 2017 Total		
	Annual ISR Forecast	**Actual Plant in Service**	**Variance**
Customer Request/Public Requirement	$19,971,000	$14,958,652	($5,012,348)
Damage Failure	$11,425,000	$13,635,023	$2,210,023
Subtotal Non-Discretionary	*$31,396,000*	*$28,593,675*	($2,802,325)
Asset Condition	$26,481,000	$18,725,716	($7,755,284)
Non-Infrastructure	$271,000	$0	($271,000)
System Capacity & Performance	$20,330,000	$28,169,947	$7,839,947
Subtotal Discretionary	*$47,082,000*	*$46,895,663*	*($186,337)*
Total Capital Investment in System	**$78,478,000**	**$75,489,338**	**($2,988,662)**

* ( ) denotes an underspend for the period

The variances shown in Table 1 reflect the timing of when plant investment is placed into service. In general, once equipment is energized and placed into service to support electric load, capital costs are transferred from FERC Account 107 (Construction Work in Progress or CWIP) to FERC Account 106 (Plant-In-Service), which is when the underlying capital work becomes used and useful in the service of customers. This can differ by the type of plant and facility. For example, electric distribution line equipment is normally placed in service closer to the time it is installed because it is typically energized at that time and begins to support electric load, and therefore, is used and useful in the service of customers. Because electric distribution line equipment is typically energized as it is installed, a relatively significant amount of plant is placed into service as work progresses. By contrast, substation construction typically involves multi-year projects. Therefore, the assets must pass testing, the work must be commissioned, and the assets must be energized before they can be placed in service. Because substation construction is typically completed in one or more phases as part of a multi-year process, the assets will only be placed in service to serve customers once all work in a particular phase is completed.

Table 2 provides the total COR for FY 2017, which was $7.8 million. This total was approximately $2 million under the forecast for FY 2017. The Non-Discretionary Sub-category was $4.8 million, which was $0.1 million over the annual planned amount of $4.7 million. The Discretionary Sub-category was $2.9 million, which was $2.1 million under the annual planned amount of $5.0 million. This variance was due primarily to lower spending than planned on the South Street project within the Asset Condition category and the deferral of New London project in within the System Capacity and Performance category.

<u>Table 2</u>

FY 2017 Cost of Removal by Category

	FY 2017 Total		
	Annual ISR Forecast	**Actual COR**	**Variance**
Customer Request/Public Requirement	$1,924,000	$1,563,779	($360,221)
Damage Failure	$2,832,000	$3,303,438	$471,438
Subtotal Non-Discretionary	*$4,756,000*	*$4,867,217*	*$111,217*
Asset Condition	$3,990,000	$2,250,602	($1,739,398)
Non- Infrastructure	$0	$1,493	$1,493
System Capacity & Performance	$1,055,000	$687,638	($367,362)
Subtotal Discretionary	*$5,045,000*	*$2,939,732*	*($2,105,268)*
Total Capital Investment in System	**$9,801,000**	**$7,806,949**	**($1,994,051)**
* ( ) denotes an underspend for the period			

II. FY 2017 Capital Spending Summary

As set forth in Table 3 below, for fiscal year 2017 (FY 2017), the Company spent $84.1 million for capital investment projects against a FY 2017 budget of $83.4 million. Spending for FY 2017 was within 1% of budget, with an over-budget variance of approximately $0.7 million.

For the fiscal year, the Non-Discretionary category was $4.9 million over-budget, and the Discretionary category was $4.2 million under-budget. The primary driver of the Non-Discretionary category budget over-spending variance was the Damage/Failure category, which was $4.1 million over-budget. The primary driver of the Discretionary category budget under-spending variance was the Asset Condition category (absent South Street), which was approximately $2.3 million under-budget and the System Capacity & Performance category, which was approximately $2.0 million under-budget for FY 2017. Capital spending on the South Street project, which was managed as a separate Discretionary sub-category, was $15.1 million, which was $0.3 million under the annual approved budget of $15.4 million. The key drivers and variances by category are discussed in detail in Section III below.

Table 3

FY 2017 Capital Spending by Category

	ISR Budget	Actual	Variance*
Customer Request/Public Requirement	$19,450,500	$20,232,660	$782,160**
Damage Failure	$11,467,000	$15,614,335	$4,147,335
Subtotal Non-Discretionary	*$30,917,500*	*$35,846,995*	$4,929,495
Asset Condition	$18,520,180	$16,204,371	($2,315,809)
Non-Infrastructure	$275,000	$621,795	$346,795
System Capacity & Performance	$18,368,206	$16,370,536	($1,997,671)
Subtotal Discretionary (Without South Street)	*$37,163,386*	*$33,196,702*	($3,966,684)
South Street Project	$15,360,000	$15,069,790	($290,210)
Subtotal Discretionary	*$52,523,386*	*$48,266,492*	*($4,256,894)*
Total Capital Investment in System	**$83,440,886**	**$84,113,487**	**$672,600**

* ( ) denotes an underspend for the period
** Adjusted by $32,000 from the FY 2017 ISR 4Q Report to eliminate a double counting of meter costs recovered through the 2017 Renewable Energy Growth Program Factor Filing.

III. FY 2017 Capital Spending by Key Driver Category

1. <u>Non- Discretionary Spending</u>

a. <u>Customer Request/Public Requirement - $0.8 million over-budget for FY 2017</u>

Capital spending for FY 2017 in the Customer Request/Public Requirement category (*previously called the Statutory/Regulatory category*) was $20.2 million, which was approximately $0.8 million over the FY 2017 budget of $19.4 million. This variance differs by $32,000 from the FY 2017 RI ISR 4Q Report for this category as a result of an adjustment to remove capital investment that was previously accounted for in the RI Energy Renewable Energy Growth Program/Meter Investment filing. This adjustment eliminates any double recovery, and the reduction in spending is reflected in the revenue requirement testimony and attachments in this filing.

This variance was driven primarily by the following over-budget projects:

- Capital spending for FY 2017 on the Block Island Transmission System (BITS) Wakefield Substation Upgrades project was over-budget by approximately $1.9 million in the Distributed Generation budget classification. This variance was driven by higher than expected soil remediation environmental costs, an increase project estimate based on final engineering detail, and carry-over charges the Company originally expected would be complete in FY 2016 but which were delayed into FY 2017.

- Capital spending for FY 2017 on Distributed Generation projects was approximately $0.8 million over-budget, due to reimbursements collected in prior fiscal years for construction that occurred in FY 2017.

- Capital spending for FY 2017 on New Business Residential and Commercial projects was a combined $3.1 million over-budget primarily due to the LNG Plant service terminal in Providence was over-budget by approximately $1.5 million due to a reimbursement received in early April 2017, which was expected in late March 2017. Also, the New Business Residential and Commercial blankets had higher spending as customer connections increased relative to prior years.

Among the major projects in this category, the following under-budget projects offset over-spending projects:

- Capital spending for FY 2017 on the Public Requirements projects was a combined $4.1 million under-budget due to reimbursements collected on projects that were completed in prior fiscal years, such as the I-195 and Apponaug Circulator Department of Transportation projects.

- Capital spending for FY 2017 on the Transformer Purchase blanket was $0.9 million under-budget, primarily due to the ability to utilize excess stock already in inventory.

Detailed budget and actual spending by budget classification for the Customer Request/Public Requirement category is shown in Table 4 below.

<u>Table 4</u>

FY 2017 Capital Spending
Customer Request/Public Requirement Category

		FY 2017 Total		
Category	**Budget Classification**	**Annual ISR Budget**	**Actual**	**Variance**
Customer Request/Public Requirement	Third-party Attachments	$155,000	$160,043	$5,043
	Distributed Generation	$529,000	$3,759,805	$3,230,805
	Land and Land Rights	$187,000	$199,326	$12,326
	Meters – Distribution	$2,170,000	$1,843,630	($326,370)
	New Business – Commercial	$5,577,000	$7,815,275	$2,238,275
	New Business – Residential	$3,728,000	$4,597,891	$869,891
	Outdoor Lighting – Capital	$541,000	$143,845	($397,155)
	Public Requirement	$3,813,500	($299,289)	($4,112,789)
	Regulatory Requirement	$0	$175,269	$175,269
	Transformers & Related Equipment	$2,750,000	$1,836,866	($913,134)
	Customer Request/Public Requirement Sub-Total	**$19,450,500**	**$20,232,660**	**$782,160**

* ( ) denotes an underspend for the period

b. ***<u>Damage/Failure - $4.1 million over-budget for FY 2017</u>***

Capital spending for FY 2017 in the Damage/Failure category was $15.6 million, which was approximately $4.1 million over the FY 2017 budget of $11.5 million. This variance was driven primarily by the following over-budget projects:

- Capital spending for FY 2017 on the unbudgeted Valley 102 Substation 22T Replacement project was $1.7 million. The failed 22T transformer was replaced in the first quarter to ensure that the unit was on-line for peak summer load. This project is complete.

- Capital spending for FY 2017 on the Storm Capital Confirming program was $2.0 million, which was approximately $0.5 million over the FY 2017 budget of $1.5 million primarily due to the Labor Day storm, and wind/snow related storm events in the months of February and March 2017.

- Capital spending for FY 2017 on Damage/Failure blanket was approximately $11.8 million, which was approximately $1.8 million more than the budget of $10.0 million for the fiscal year. This over-budget variance was due primarily to the reasons below:

    - Capital spending on the Damage/Failure blanket for monthly confirming work orders (CWOs) was $5.4 million. These CWOs are used by local Operations to address immediate needs for capital construction to return the system or a customer's service to normal operating condition. This work is often done in response to customer outages or public emergencies. In addition, this work is generally in the area of overhead construction and can either be minor (i.e. residential service replacement) or major (i.e. pole replacements).

    - Capital spending on the Damage/Failure blanket for work at the Franklin Square Substation was $0.6 million. This was for an emergency replacement of failed transformer cables, breaker, and replacement of the substation's fire escape.

    - A majority of the remaining $5.8 million of capital spending on the Damage/Failure blanket was for work done in response to substation equipment failures, underground cable failures, street light outages, damaged/leaking pad-mounted transformer replacements, and overhead pole and equipment replacements.

Detailed budget and actual spending by budget classification for the Damage/Failure category is shown in Table 5 below.

Table 5

FY 2017 Capital Spending
Damage/Failure Category

		FY 2017 Total		
Category	**Budget Classification**	**Annual ISR Budget**	**Actual**	**Variance**
Damage/Failure	Damage/Failure	$9,967,000	$11,790,790	$1,823,790
	Major Storms - Distribution	$1,500,000	$2,019,777	$519,777
	Substation	$0	$1,803,768	$1,803,768
	Damage/Failure Sub-Total	**$11,467,000**	**$15,614,335**	**$4,147,335**

* ( ) denotes an underspend for the period

2. Discretionary Spending

a. Asset Condition - $2.3 million under-budget for FY 2017

Capital spending for FY 2017 in the Asset Condition category (excluding the South Street project) was $16.2 million, which was $2.3 million under the FY 2017 budget of $18.5 million. The total variance for this category was driven primarily by the following under-budget projects:

- Capital spending for FY 2017 for the Ocean State Asset Replacement Blanket was under-budget by approximately $0.9 million due to lower than anticipated spending on small-scale asset replacement work.

- Capital spending for FY 2017 on the Underground Residential Development Injection/Rehabilitation (IRURD) and the RI Underground Replacement Program projects was a combined $0.9 million under-budget. This variance was driven primarily by a timing issue due to a delay in invoicing for the projects in FY 2017.

- For FY 2017, the Company budgeted approximately $0.5 million for a spare substation transformer which resulted in an under-budget variance due to the Company deferring the purchase of this equipment.

Among the major projects in this category, the following over-budget projects offset under-spending projects were:

- Capital spending for FY 2017 on the Inspections & Maintenance program was $3.0 million, which was approximately $0.5 million over-budget of $2.5 million. This variance due to the Company advanced more work than originally planned.

b. *Asset Condition - South Street – $0.3 million under-budget variance for FY 2017.*

Capital spending for FY 2017 on the South Street Indoor Substation Replacement project was approximately $15.1 million, which was approximately $0.3 million under-budget for the fiscal year.

Detailed budget and actual spending by budget classification for the Asset Condition category is shown in Table 6 below.

Table 6

FY 2017 Capital Spending
Asset Condition Category

		FY 2017 Total		
Category	**Budget Classification**	**Annual ISR Budget**	**Actual**	**Variance**
Asset Condition	Asset Replacement	$14,812,580	$12,339,114	($2,473,466)
	Asset Replacement – South Street	$15,360,000	$15,069,790	($290,210)
	Asset Replacement - I&M	$2,510,000	$3,022,250	$512,250
	Reliability	$600,000	$346,385	($253,615)
	Safety	$597,600	$436,562	($161,038)
	Outdoor Lighting – Capital	$0	$60,060	$60,060
	Asset Condition Sub-Total	**$33,880,180**	**$31,274,161**	**($2,606,019)**

* ( ) denotes an underspend for the period

c. *Non-Infrastructure - $0.3 million over-budget for FY 2017*

Capital spending for the FY 2017, Non-Infrastructure category was $0.6 million, which was $0.3 million over the FY 2017 budget of approximately $0.3 million. The primary drivers of this variance were due to higher than budgeted general equipment purchases.

Detailed budget and actual spending by budget classification for the Non-Infrastructure category is shown in Table 7 below.

Table 7

FY 2017 Capital Spending
Non-Infrastructure Category

		FY 2017 Total		
Category	**Budget Classification**	**Annual ISR Budget**	**Actual**	**Variance**
Non-Infrastructur	Corporate/Administrative/General	$0	$123,869	$123,869
	General Equipment - Distribution	$100,000	$383,474	$283,474
	Telecommunications	$175,000	$153,151	($21,849)
	Other	$0	($38,699)	($38,699)
	Non-Infrastructure Sub-Total	**$275,000**	**$621,795**	**$346,795**

* ( ) denotes an underspend for the period

d. System Capacity & Performance - $2.0 million under-budget for FY 2017

Capital spending for FY 2017 for the System Capacity and Performance category was approximately $16.4 million, which was approximately $2.0 million under the FY 2017 budget of approximately $18.4 million. This variance was driven primarily by the following under budget projects:

- As noted in the FY 2017 Third Quarter Report Electric ISR Report, the New London Avenue project was deferred into FY 2018 in order to offset other over spending in the Discretionary portfolio (except South Street). Therefore, capital spending for FY 2017 was under-budget by approximately $3.8 million.

- Capital spending for FY 2017 on the Aquidneck Island projects was a combined $1.4 million under-budget. This variance was primarily driven by delays in securing rights and permitting for the new substations.

- The Long Terms Study funding project for FY 2017 was $0.8 million under-budget. The Company transferred approximately $1.0 million of Providence area study costs, which were prior fiscal charges, into the South Street project during FY 2017. The Company did not advance any additional construction in the discretionary category (excluding South Street) as a result of this transfer. This is in-line with the Company's agreement not to advance or delay works in the discretionary category as a result of changes to the South Street spending.

Among the major projects in this category, the following over-budget projects partially offsetting the under-budget projects were as follows:

- Capital spending for FY 2017 on the Chase Hill substation project was $4.9 million which was $1.3 million over the budget of $3.6 million. As previously noted in the Company's FY 2017 Third Quarter Electric ISR Report, the Company reallocated FY 2017 funding from the New London substation project to this project in order to complete sufficient work to energize the substation in FY 2017.

- Capital spending for FY 2017 on the projects related to Kilvert Street 87 was approximately $1.4 million over budget. These projects were originally expected to be complete in FY 2016, and the budget for FY 2017 was for final charges during the closeout of the project. However, construction for these projects was partially delayed into FY 2017, contributing to the over spending variance.

- Capital spending on the Volt/Var Pilot Project for FY 2017 was $1.3 million which was approximately $0.6 million over the fiscal year budget of $0.7 million. The variance was primarily due to increased costs for the communications solution for the project.

Detailed budget and actual spending by budget classification for the System Capacity & Performance category is shown in Table 8 below.

Table 8

FY 2017 Capital Spending
System Capacity & Performance Category

	FY 2017 Total		
Budget Classification	**Annual ISR Budget**	**Actual**	**Variance**
Load Relief	$15,725,613	$13,799,517	($1,926,096)
Corporate/Admin/General	$0	($180,444)	($180,444)
Reliability	$2,452,473	$2,689,158	$236,685
Substation	$190,120	$62,305	($127,815)
System Capacity & Performance Sub-Total	**$18,368,206**	**$16,370,536**	**($1,997,671)**

* ( ) denotes an underspend for the period

In summary, capital spending for FY 2017 in the entire Discretionary category was $48.3 million, which was $4.2 million under the fiscal year budget of $52.5 million. This under-budget variance was predominately driven by the deferral and delays in the New London and Aquidneck Island projects, lower spending in the Asset Replacement blanket, with offsets of over-budget spending on other projects. The Company strived to manage the over and under-budget spending on the remaining discretionary projects thru the fiscal year to achieve an overall discretionary portfolio approximate to the $37.1 million discretionary budget that excluded the South Street project. The South Street project, managed within a separate discretionary sub-category, came in 2% under its annual budget of $15.4 million.

Finally, in Docket No. 4473, the PUC ordered the Company to include in the FY 2017 Electric ISR Plan filing a proposal to identify and report in quarterly and annual reconciliation filings the projects that either exceeded or were under the fiscal year-to-date and fiscal year-end budgets by ten percent (10%).[2] For the identified projects, the Company must note whether variances were due to the project being accelerated or delayed, or whether the variances were due to an increase or decrease in total project cost. The Company agreed to provide in the quarterly reports explanations for the portfolio of large projects[3] with variances that exceed +/- 10% of the annual fiscal year budget. These projects represent approximately $18.2 million of the FY 2017 budget of $83.4. Information regarding these projects is included in Table 9 below.

---

2 Docket No. 4473 Order No. 21559 at p. 25.
3 Large projects are defined as projects that exceed $1.0 million in total project cost.

Table 9

FY 2017 Project Variance Report

Project Description	Project Funding Number(s)	FY 2017 Total Budget	FY 2017 Total Actual	FY 2017 Total Variance	Variance Cause
Chase Hill D-Line and D-Sub	C024175,C024176	$3,690	$4,939	$1,249	Project advanced
Kent County 2nd Transformer	CD01101, CD01104	$1,940	$1,674	($266)	Resource needs less than forecasted
New London Avenue D-Line and D-Sub	C032002, C028920, C028921	$4,090	$270	($3,820)	Project deferred to FY 2018
Aquidneck Island Projects (Gate 2, New port, Jepson)	CD00649, C024159, C015158, C028628, C054054, CD00656	$2,882	$1,478	($1,404)	Project delayed due to permitting issues
Kilvert Street #87 Upgrades	C036516, C036522	$146	$1,521	$1,375	Project delayed from FY 2016 to FY 2017
Volt/Var Pilot Program	C046352, C052708, C053111	$852	$1,573	$721	Communication solution higher than initial budget
Metal Clad Substation Retirements (Hyde Ave., Daggett Ave., Southeast, and Front St.)	C050778, C049910, C053658, C053657, C050006, C050017	$2,310	$2,091	($219)	Front St deferred from FY 2017
BITS Wakefield Sub Upgrades	C046386	$519	$2,405	$1,886	Increase in cost
LNG D-Line and D-Sub	C051203,C051204	$697	$2,217	$1,520	Reimbursement delayed to FY2018 Q1.
		$17,126	**$18,168**	**$1,042**	

* ( ) denotes an underspend for the period

3. FY 2017 Work Plan Accomplishments

Table 10 below provides actual work plan accomplishments against the goals of the FY 2017 work plan.

Table 10

FY 2017 Work Plan Accomplishments

Program Type	FY 2017 Goals	FY 2017 Accomplishments	Comments
Distribution Transformer Upgrades	200	200	100% Complete
I&M Program	N/A	7,000 structures	11 Feeders 100% Complete
Substation Battery Replacement Program	3	4	133% Complete
Substation Breaker Replacement Program	11	10	90% Complete [3]

[3] Valley Street failure did not allow the breaker to be completed. Re-scheduled for completion in the Fall of 2017.

IV. FY 2017 Vegetation Management

For FY 2017, the Company completed 100% of its annual distribution mileage cycle pruning goal of 1,239 miles. This represented an associated spend of 100% of the FY 2017 budget for the cycle pruning program. Overall, for FY 2017, the Company's VM operation and maintenance (O&M) spending was on budget at $8.7 million.

Table 11 below provides the FY 2017 spending for all sub-components in the VM category.

Table 11

FY 2017 Vegetation Management O&M Spending

	FY 2017 Annual ISR Budget	FY 2017 Actual Spend	Variance*	% Spend
Cycle Pruning (Base)	$5,050,000	$5,049,875	($125)	100%
Hazard Tree	$950,000	$931,600	($18,400)	98%
Sub-T (on & off road)	$780,000	$677,445	($102,555)	87%
Police/Flagman Details	$714,000	$731,684	$17,684	102%
Core Crew (all other activities)	$1,225,000	$1,321,437	$96,437	108%
Total VM O&M Spending	**$8,719,000**	**$8,712,041**	**($6,959)**	**100%**

* ( ) denotes an underspend for the period

	FY 2017 Goal	FY 2017 Complete	FY 2017 % Complete
Distribution Mileage Trimming	**1,239**	**1,239**	**100%**

V. FY 2017 Inspection and Maintenance

For FY 2017, the Company completed 100% of its annual structure inspection goal of 50,567 with an associated spend of $0.9 million or approximately 71% of the I&M Repair and Inspection budget of approximately $1.3 million. The Repairs and Inspection Related Costs subcategory includes the FY 2017 mobile elevated voltage testing and repairs, which the PUC approved in Docket No. 4237. Table 12 below provides the total FY 2017 spending for all components in the I&M category.

Table 12

FY 2017 Inspection and Maintenance O&M Spending

	FY 2017 Annual ISR Budget	FY17 Actual Spend	Variance*	FYTD % Spent
Opex Related to Capex	$450,000	$276,489	($173,511)	61%
Repair & Inspections Related Costs	$817,000	$608,144	($208,856)	74%
System Planning & Protection Coordination Study	$25,000	$33,722	$8,722	135%
Total I&M O&M Spending	**$1,292,000**	**$918,355**	**($373,645)**	**71%**
* ( ) denotes an underspend for the period				

	FY 2017 Goal	FY 2017 Completed	FY 2017 % Completed
RI Distribution Overhead Structures Inspected	**50,567**	**50,567**	**100%**

The Company began performing inspections on its overhead distribution system in FY 2011, and, in FY 2012, began performing the repairs based on those inspections. The Company categorizes the deficiencies found as Level I, II, or III, and repairs Level I deficiencies either immediately or within approximately one week of the inspection. The Company bundles Level II and III work for planned replacement. At this time, the Company has completed repairs reported for approximately 33% of the total deficiencies found. Total deficiencies found and repairs made-to-date are shown in the table below.

Summary of Deficiencies and Repair Activities RI Distribution				
Year Inspection Performed	Priority Level/Repair Expected	Deficiencies Found (Total)	Repaired as of 03/31/17	Not Repaired as of 03/31/17
FY 2011	I	18	18	0
	II	13,146	13,128	18
	III	28	28	0
FY 2012	I	17	17	0
	II	15,847	15,454	393
	III	626	567	59
FY 2013	I	15	15	0
	II	26,882	14,906	11,976
	III	9,056	4,165	4,891
FY 2014	I	11	11	0
	II	23,196	2,612	20,584
	III	8,776	1,350	7,426
FY 2015	I	5	5	0
	II	21,549	1	21,548
	III	4,391	0	4,391
FY 2016	I	2	2	0
	II	11,596	0	11,596
	III	6,498	0	6,498
FY 2017	I	2	2	0
	II	8,300	0	8,300
	III	7,539	0	7,539
Total Since Program Inception	**I, II, III**	**157,500**	**52,281**	**105,219**

FY 2017 – I&M Level 1 Deficiencies Repaired						
Year Inspection Performed	Deficiencies Found	Structure Number	Location	Description of Work Performed	Inspection Date	Repaired Date
	1	5	Audrey St, Providence	Service taps lifted wire on ground	2/11/2017	2/22/2017
	1	280-31	Mendon Fd 7 Rd, Cumberland	Abandoned property, lift secondary taps from service	4/22/2016	4/22/2016

As shown in the table below, results of the Company's manual elevated voltage testing for FY 2017 identified only nine (9) instance of potential elevated voltage through either overhead or manual elevated voltage inspections.

Manual Elevated Voltage Testing				
Manual Elevated Voltage Testing	**Total System Units Requiring Testing**	**FY 2017 Units Completed thru 03/31/17**	**Units with Voltage Found (>1.0v)**	**Percent of Units Tested with Voltage (>1.0v)**
Distribution Facilities	250,441	50,479	1	0.002%
Underground Facilities	13,870	4,071	0	0.000%
Street Lights	5,884	5,884	8	0.136%

In addition, the FY 2017 mobile elevated voltage testing revealed eight (8) instances of elevated voltage readings of one volt or more on street lights. Of the eight (8) mobile events that were recorded during the mobile survey having 1 volt or greater, one (1) was found and documented as having elevated voltage at or above 4.5 volts, and seven (7) were found and documented as having elevated voltage below 4.5 volts. In each of these events, the Company took immediate remedial action by disconnecting the asset, placing protective barriers, and/or repairing the asset. All of the Company's assets that registered greater than one volt were permanently repaired between August 23, 2016 and August 24, 2016.[4]

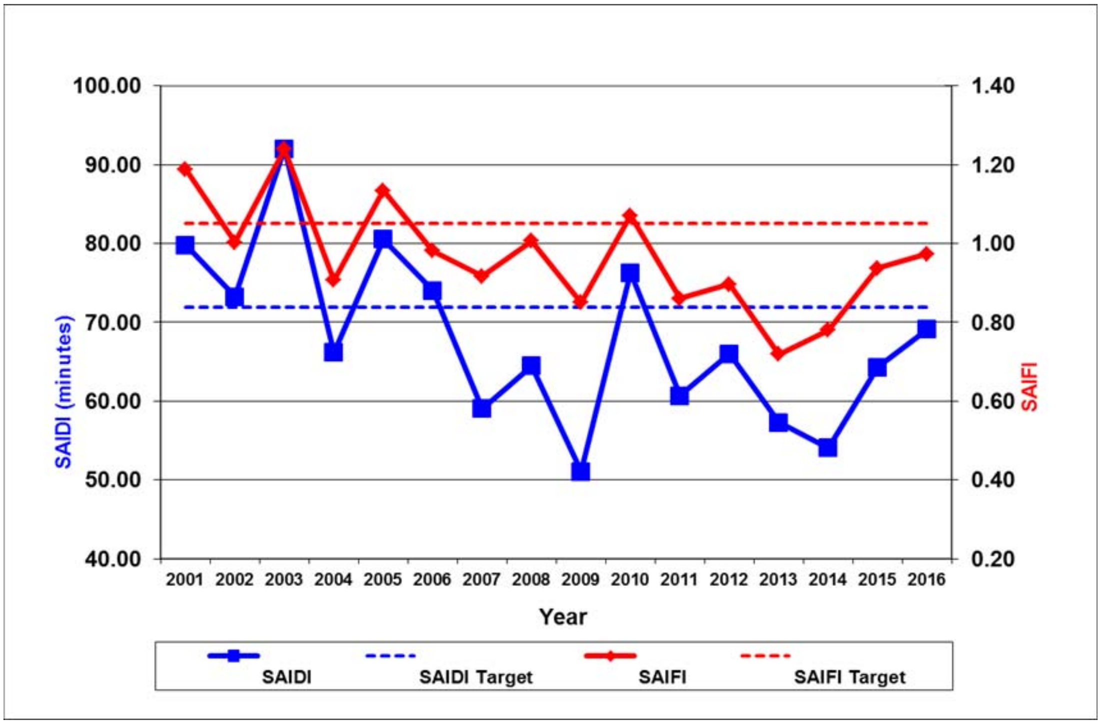
4 This information is also being provided in the FY 2017 Annual Contact Voltage Report.

VI. Reliability Performance

The Company met both its System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) performance metrics in CY 2016, with SAIFI of 0.97 against a target of 1.05, and SAIDI of 69.13 minutes, against a target of 71.9 minutes. The Company's annual service quality targets are measured excluding major event days.[5] A comparison of reliability performance in CY 2016 relative to that of previous years is shown in Table 13 below. The Company's performance has shown an improving downward trend over the past several years with major event days excluded.

Table 13

RI Reliability Performance CY 2001 – CY 2016
Regulatory Criteria (Excluding Major Event Days)



5 A Major Event Day (MED) is defined as a day on which the daily system SAIDI exceeds a MED threshold value (5.26 minutes for CY 2016). For purposes of calculating daily system SAIDI, any interruption that spans multiple calendar days is accrued to the day on which the interruption began. Statistically, days having a daily system SAIDI greater than the MED are days on which the energy delivery system experiences stress beyond that normally expected, such as during severe weather.

CY 2016 had four days that were characterized as a major event day. Table 14 below provides additional details including the event, dates, the total number of customers interrupted, and the daily SAIDI performance metric.

Table 14

CY 2016 Major Event Days

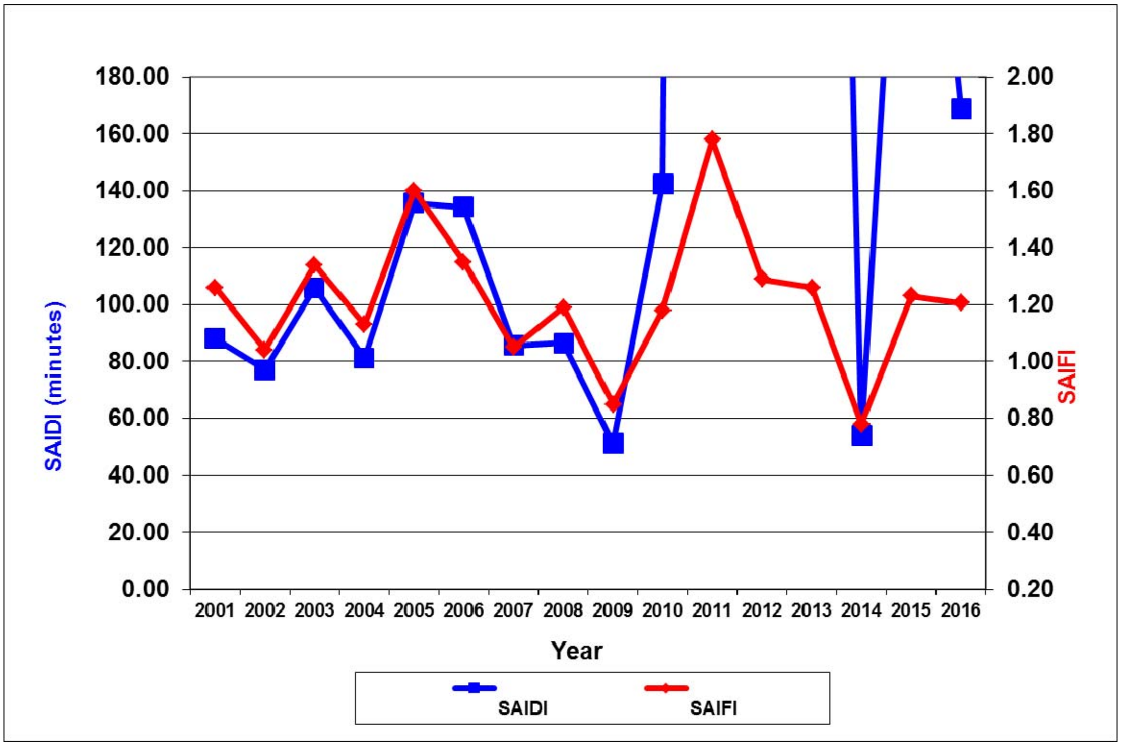
Event	Days Excluded	Total Customers Interrupted	Daily SAIDI
Storm Lexi	2/5/2016	58,233	75.597
Windstorm	2/25/2016	19,683	79.23
Thunderstorm	7/22/2016	15,917	90.509
Storm*	9/5 to 9/6/2016	19,551	NA

* Storm started mid-day 9/5/2016 and carried over to 9/16/2016

Reliability performance, including major event days, is shown in Table 15 below for CY 2001 through CY 2015. SAIDI for 2011, including major event days, exceeds the scale of the chart, at 1,947 minutes (32.5 hours). This was driven by Tropical Storm Irene. CY 2011 through CY 2013 indicates the greatest differences between performance with and without major event days. In CY 2011, the Company experienced ten major events days from five separate events. Tropical Storm Irene and the October Snowstorm accounted for seven of those major event days. In CY 2012, the Company experienced four major event days from two separate events. Hurricane Sandy accounted for three of those major event days. In CY 2013, the Company experienced three major events days from two separate events. The February 8th Nor'easter accounted for two of those major event days. In CY 2014, the Company did not experience any major event days, and in CY 2015, the Company experienced only one major event day. For CY 2016, the Company experienced four major event days. Although a major event day is typically interpreted to mean a calendar day, since the Labor Day weekend storm began mid-day September 5, 2016, the events of the following day, September 6, 2016, were also considered in determining the storm's impact and whether it qualified as a Major Event Day.

Table 15

RI Reliability Performance CY 2001 – CY 2016
Regulatory Criteria (Including Major Event Days)



PRE-FILED DIRECT TESTIMONY

OF

AIDIMARYS MARTINEZ

August 1, 2017

Table of Contents

I. INTRODUCTION

Q. Please state your full name and business address.

A. My name is Aidimarys Martinez, and my business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. Please state your position.

A. I am a Lead Analyst for New England Revenue Requirements in the Regulation and Pricing department of National Grid USA Service Company, Inc. (Service Company). Service Company provides engineering, financial, administrative, and other technical support to subsidiary companies of National Grid USA (National Grid). My current duties include revenue requirement responsibilities for National Grid's electric and gas distribution activities in New England, including the electric operations of The Narragansett Electric Company d/b/a National Grid (Narragansett or the Company).

Q. Please describe your education and professional experience.

A. In 2000, I earned a Bachelor of Science degree in Accounting and Business Administration from the University of Puerto Rico. During college, I interned at Arthur Andersen LLP in San Juan, Puerto Rico, where I worked as a tax analyst. I also interned at PaineWebber Company in New York, New York, where I worked as an accounting analyst. In February 2001, I joined Accenture in Boston, Massachusetts, where I worked as a consultant for companies such as EMC, Boston Scientific, and National Grid USA.

In August 2004, I joined National Grid USA in the electric transmission business as an analyst in the Finance department. Since that time, I have held various positions in National Grid USA's Finance organization, supporting various companies. In April 2016, I joined the Regulation and Pricing department in the New England Revenue Requirements group.

Q. Have you previously testified before the Rhode Island Public Utilities Commission (PUC)?

A. Yes, I have testified before the Rhode Island Public Utilities Commission (PUC) in Docket No. 4682. In that docket, I provided testimony regarding the Company's proposed revenue requirements for the Company's Fiscal Year (FY) 2018 Electric Infrastructure, Safety, and Reliability (ISR) Plan Proposal.

Q. What is the purpose of your testimony?

A. In this docket, the PUC approved a new Electric ISR factor, which went into effect on April 1, 2016. That factor was based on a projected FY 2017 ISR revenue requirement of $27,703,824 for the estimated operation and maintenance (O&M) work associated with the Company's vegetation management (VM) and inspection and maintenance (I&M) programs for the Company's FY ended March 31, 2017, and on the estimated ISR plant additions during the Company's FY ended March 31, 2017, 2016, 2015, 2014, 2013, and 2012, and which were incremental to the levels reflected in rate base in the Company's last base rate case (Docket No. 4323). The purpose of my testimony is to present an updated FY 2017 ISR revenue requirement associated with actual FY 2017 O&M programs, the FY 2012 through FY 2017 incremental plant additions, and actual tax deductibility percentages and tax net operating loss (NOL) for FY 2016 capital additions. Actual tax deductibility percentages for FY 2017 plant additions will not be known until the Company files its FY 2017 income tax return in December 2017. Consequently, the actual tax deductibility percentages for FY 2017 plant additions will be reflected in the Company's FY 2018 Electric ISR Reconciliation filing next year and will generate a true-up adjustment in that filing. The updated FY 2017 revenue requirement also includes an adjustment associated with the property tax recovery formula that was approved in Docket No. 4323. The property tax recovery adjustment became effective for periods subsequent to the rate year in Docket No. 4323, which ended on January 31, 2014. Accordingly, the property tax recovery adjustment covers only the months of February and March of 2014, and the 12-month periods ended March 31, 2015, March 31, 2016 and March 31, 2017. As shown in Attachment AM-1, Page 1 at Line 16, the updated FY 2017 ISR revenue requirement collectible through the Company's ISR factor for the FY 2017 period, including the one-time catch up adjustment related to the NOL impact on prior fiscal years' revenue requirements, totals $19,770,035. This is a decrease of $7,933,789 from the projected FY 2017 Electric ISR revenue requirement of $27,703,824 previously approved by the PUC. Approximately 72 percent, or $5.7 million, of this decrease is related to decreased property tax recovery. Approximately 23 percent, or $1.8

million, of this decrease is related to decreased spending on actual plant additions versus the capital plan budgets. Approximately 5 percent, or $373,645, of this decrease is related to decreased spending on actual inspection and maintenance operations and maintenance versus the plan budget.

At this time, the Company's Tax Department estimates that the Company will earn taxable income in FY 2017, and, therefore, no NOL offset to accumulated deferred income taxes has been included in the vintage FY 2017 rate base calculation. The Company's Tax Department calculated taxable income when the Company closed its books for FY 2017, which has formed the basis for the tax NOL estimate in this reconciliation. However, National Grid's income tax returns for each fiscal year are not filed until mid-December following the end of the fiscal year, which occurs after the August 1 due date for each fiscal year's ISR reconciliation filing to the PUC. Therefore, in its FY 2018 Electric ISR Reconciliation filing, the Company will true up this estimated tax NOL to the NOL that is ultimately reflected in National Grid's FY 2017 income tax returns.

Q. Are there any schedules attached to your testimony?

A. Yes, I am sponsoring the following Attachment with my testimony:

- Attachment AM-1: Electric Infrastructure, Safety, and Reliability Plan Revenue Requirement Reconciliation

II. ISR PLAN FY 2017 REVENUE REQUIREMENT

Q. Did the Company calculate the updated FY 2017 ISR revenue requirement in the same fashion as calculated in the previous ISR Factor submissions and the August 2016 ISR factor reconciliation?

A. Yes, with two exceptions. First, in December 2015, the U.S. House and Senate signed the Protecting Americans from Tax Hikes (PATH) Act into law, which extended accelerated bonus depreciation for tax purposes at a rate of 50 percent through calendar year 2017, but then phases down to 40 percent for 2018 and 30 percent for 2019. As a result, the Company's FY 2017 revenue requirement includes the impact of the PATH Act on vintage FY 2016 and FY 2017 investment because the vintage FY 2016 and FY 2017 tax depreciation calculations now include a deduction for bonus depreciation at 50 percent. Secondly, the IRS clarified its tangible property regulations, and, as a result, the Company submitted a §481(a) election with the IRS to apply for a change in accounting method regarding the treatment of gains or losses on asset retirements which are characterized as partial retirements for tax purposes. On December 17, 2015, this election was submitted to the PUC as required under IRS rules. The late partial disposition election was made to protect the Company's deduction of cost of removal (COR). Otherwise, the Company would have been required to make a §481(a) adjustment to reverse all historical COR deductions, resulting in a substantial reduction in deferred tax liabilities. Because the Company made the election, COR remains 100 percent deductible. Therefore, the Company's FY 2017 revenue requirement now includes the cumulative impact on deferred income taxes for additional tax deductions reflected in the vintage FY 2015 through FY 2017 tax depreciation calculations related to losses incurred on partial retirements.

Other than these changes, the updated FY 2017 ISR revenue requirement calculation is nearly identical to the ISR revenue requirement used to develop the approved ISR factors that were effective April 1, 2016, and which were described in previous testimony in this proceeding. However, the updated calculation incorporates updated ISR investment amounts and known tax deductibility percentages. I will rely on the testimony of Amy S. Tabor included in the Company's FY 2017 Electric ISR Plan and Section 5 of that Plan for a detailed description of the revenue requirement calculation, and I will limit this testimony to summarizing the revenue requirement, describing the tax NOL impact, and describing the update for the known tax deductibility percentages.

Q. What are NOLs?

A. Tax NOLs are generated when the Company has tax deductions on its income tax returns that exceed its taxable income. This does not mean that the Company is suffering losses in its financial statements; instead, the Company's tax NOLs are the result of the significant tax deductions that have been generated in recent years by the bonus depreciation deductions described above, as well as capital repairs tax deductions. In addition to first-year bonus tax depreciation discussed previously, the United States tax code allows the Company to classify certain costs as repairs expense for which the Company takes as an immediate deduction on its income tax return; however, these costs are recorded as plant investment on the Company's books. These significant bonus depreciation and capital repairs tax deductions have exceeded the amount of taxable income reported in tax returns filed for FY 2009 to FY 2016, with the exception FY 2011. NOLs are recorded as non-cash assets on the Company's balance sheet and represent a benefit that the Company and customers will receive when the Company is able to realize actual cash savings when it applies these NOLs against taxable income in the future.

Accumulated NOLs represent an offset to the company's accumulated deferred income taxes, which are included as a credit, or reduction in the calculation of rate base. Consequently, including accumulated NOLs in the revenue requirement calculations reduces the amount of accumulated deferred taxes in the derivation of ISR rate base. As described previously, deferred taxes are an offset, or reduction, to ISR rate base and are intended to represent the amount of cash benefit generated and associated with ISR investment related tax deductions that the Company has reflected in its income tax returns.

Q. Has the Company included NOL in its vintage FY 2017 rate base calculation?

A. At this time, the Company estimates that it will earn taxable income in FY 2017, and therefore, no NOL offset to accumulated deferred income taxes has been included in the vintage FY 2017 rate base calculation. The tax depreciation calculation on vintage FY 2017 investment is an estimate until the Company files its FY 2017 tax return in December 2017. If the Company's actual FY 2017 NOL differs based on its FY 2017 tax position as filed with the IRS, that adjustment will be reflected as a prior period adjustment to the FY 2017 revenue requirement in the FY 2018 Electric ISR reconciliation filing. Conversely, if the Company is able to utilize any of its currently accumulated NOLs, that benefit will be flowed through to customers in its FY 2018 Electric ISR Reconciliation filing.

Q. Are there any updates to the FY 2016 revenue requirement that are being trued up in the FY 2017 Electric ISR Reconciliation?

A. Yes. The Company filed its FY 2016 Electric ISR Reconciliation on August 1, 2016; however, it had not filed its FY 2016 income tax return until later that year in the month of December. Consequently, the Company used certain tax assumptions, and the Company has revised its vintage FY 2016 revenue requirement to reflect the following updates on Attachment AM-1: actual capital repairs deduction rate of 29.67 percent as shown on Page 5, Line 2; actual percentage of plant eligible for bonus depreciation of 97.77 percent as shown on Page 5, Line 7; actual tax loss on retirements of $5,307,711 as shown on Page 5, Line 19; and actual NOL of $10,693,796 as shown on Page 4, Line 21.

Q. Please summarize the updated FY 2017 ISR revenue requirement.

A. As shown on Page 1, of Attachment AM-1, the Company's FY 2017 Electric ISR Program revenue requirement includes two elements: (1) O&M expense associated with the Company's VM activities and system inspection, feeder hardening, and potted porcelain cutouts, as encompassed by the Company's I&M Program, and (2) the Company's capital investment in electric utility infrastructure. The description of these elements and the related amounts are supported by the direct testimony and supporting attachments of Mr. Prabhjot S. Anand. Line 4 reflects the actual FY 2017 revenue requirement related to O&M expenses of $9,466,647.

As shown on Page 1, at Line 15 of Attachment AM-1, the revenue requirement associated with the Company's actual FY 2017 capital investment totals $10,303,388. As previously noted, the total FY 2017 revenue requirement includes the full year revenue requirement on vintage FY 2012 through FY 2017 incremental ISR plant additions above or below the level of plant additions reflected in base distribution rates. In addition, the FY 2017 revenue requirement reflects a true-up for changes to previously estimated tax depreciation expense to align with tax depreciation rates used on the Company's FY 2016 tax return, which was filed in December 2016. The total actual FY 2017 ISR Plan revenue requirement for both O&M expenses and capital investment of $19,770,035 is shown on Line 16.

Q. Please describe how the attachment to your testimony is structured.

A. Page 1 of Attachment AM-1 summarizes the individual components of the updated FY 2017 ISR revenue requirement. Lines 1 through 4 address the O&M components. Lines 5 through 11 represent the full year FY 2017 ISR revenue requirements for the incremental FY 2012 through FY 2017 ISR investments, or those investments not included in the Company's base rates, and as supported with detailed calculations on Pages 2, 4, 6, 8, 10, and 12. Line 12 represents the results of the FY 2017 property tax recovery adjustment, which is supported by a detailed calculation on pages 16 through 18 and is described below. Line 13 represents one-third of the FY 2012, FY 2013, and FY 2014 revenue requirement impact of NOLs, of which FY 2017 is the third in a three-year recovery period.

Finally, Line 14 reflects the reconciliation of the approved FY 2016 ISR revenue requirement for vintage FY 2016 plant additions with the actual vintage FY 2016 revenue requirement on those investments. As previously discussed, this reconciliation is necessary because the actual level of tax deductibility on FY 2016 investments was not known when the Company filed the FY 2016 and FY 2017 ISR Factor proposals. A detailed calculation of the updated FY 2016 revenue requirement is presented on page 4 of Attachment AM-1.

Q. Has the Company provided support for the actual level of FY 2017 ISR-eligible plant investments?

A. Yes. The description of the FY 2017 Electric ISR program and the amount of the incremental plant additions eligible for inclusion in the ISR mechanism are supported by the direct testimony and supporting attachment of Company Witness, Mr. Prabhjot S. Anand. The ultimate revenue requirement on the ISR eligible plant additions equals the return on the investment (i.e. average rate base at the weighted average cost of capital), plus depreciation expense and property taxes associated with the investment. Incremental ISR eligible plant additions for this purpose is intended to represent the net change in rate base for electric infrastructure investments, since the establishment of the Company's ISR mechanism effective April 1, 2011, and is defined as capital additions plus cost of removal, less annual depreciation expense included in the Company's rates, net of depreciation expense attributable to general plant. As discussed in the testimony of Mr. Anand, the actual ISR eligible plant additions for FY 2017 totals $75.5 million associated with the Company's FY 2017 ISR Plan (electric infrastructure investment net of general plant).

Q. Please explain the distinction between non-discretionary and discretionary capital spending as they relate to the revenue requirement calculation.

A. For purposes of calculating the capital-related revenue requirement, investments in electric infrastructure have been divided into two categories: (1) non-discretionary capital investments, which principally represent the Company's commitment to meet statutory and/or regulatory obligations; and (2) discretionary capital investments, which represent all other electric infrastructure-related capital investment falling outside of the specifically defined non-discretionary categories. The amount of discretionary investment the Company is allowed to include in the revenue requirement calculation is subject to certain limitations as shown on Page 15 of Attachment AM-1. The amount of discretionary capital investment the Company uses in the revenue requirement must be no greater than the cumulative amount of discretionary project spend as approved by the PUC in this proceeding. This means that the discretionary investment is limited to the lesser of actual cumulative discretionary capital additions or spending, or cumulative discretionary spending approved by the PUC in this docket. For purposes of the FY 2017 revenue requirement, the lesser of these items was actual discretionary capital additions of $46,895,663, as shown on Attachment AM-1, Page 15.

Q. What is the updated revenue requirement associated with actual plant additions?

A. The updated FY 2017 revenue requirement associated with the Company's actual FY 2012 through FY 2017 ISR eligible plant investments totals $10,303,388. This amount includes the updated FY 2017 revenue requirement on FY 2012 through FY 2017 ISR investments, reconciliation of the approved FY 2016 ISR revenue requirements on vintage FY 2016 investments with the actual FY 2016 revenue requirement on those investments, the third year of a three-year recovery of the true-up adjustment for the FY 2012, FY 2013 and FY 2014 ISR revenue requirements related to NOLs generated on vintage FY 2012, FY 2013 and FY 2014 ISR eligible investment, and the inclusion of the property tax recovery adjustment pursuant to the rate case settlement agreement in Docket No. 4323.

III. <u>CONCLUSION</u>

Q. Does this conclude your testimony?

A. Yes, it does.

Attachment AM-1

Attachment AM-1

Electric Infrastructure, Safety, and Reliability Plan Revenue Requirement Calculation

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Annual Revenue Requirement Summary

Line No.		Fiscal Year 2017 (a)
	Operation and Maintenance (O&M) Expenses:	
1	Current Year Vegetation Management (VM)	$8,712,041
2	Current Year Inspection & Maintenance (I&M)	$918,355
3	Electric Contact Voltage expenses included in RIPUC Docket No. 4323	($163,749)
4	**Total O&M Expense Component of Revenue Requirement**	**$9,466,647**
	Capital Investment:	
5	Actual Revenue Requirement on Incremental FY 2012 Capital included in ISR Rase Base	$269,730
6	Actual Revenue Requirement on Incremental FY 2013 Capital included in ISR Rate Base	($1,108,163)
7	Actual Revenue Requirement on Incremental FY 2014 Capital included in ISR Rate Base	$754,958
8	Actual Revenue Requirement on FY 2015 Capital included in ISR Rate Base	$3,954,989
9	Actual Revenue Requirement on FY 2016 Capital included in ISR Rate Base	$3,933,411
10	Actual Revenue Requirement on FY 2017 Capital included in ISR Rate Base	$1,835,746
11	Subtotal	$9,640,671
12	FY 2017 Property Tax Recovery Adjustment	$95,726
13	True-Up for Net Operating Losses generated in FY 2012, FY 2013 and FY 2014 - Year 3 of 3 year recovery	$470,275
14	True-Up for Net Operating Loss, Bonus Depreciation, Capital Repairs Deduction, and Loss incurred due to retirement of FY 2016 Revenue Requirement Reconciliation RIPUC Docket No. 4539	$96,716
15	**Total Capital Investment Component of Revenue Requirement**	**$10,303,388**
16	**Total Fiscal Year Revenue Requirement**	**$19,770,035**
17	FY 2017 Plan Revenue Requirement as filed on March 21, 2016	$27,703,824
18	Decrease in FY 2017 Revenue Requirement	($7,933,789)

Column (a)

1	Vegetation Management per Attachment PSA-1, Page 15, Table 11
2	Inspection & Maintenance per Attachment PSA-1, Page 16, Table 12
4	Line 1 + Line 2 + Line 3
5	Page 12 of 20, Line 29
6	Page 10 of 20, Line 31
7	Page 8 of 20, Line 31
8	Page 6 of 20, Line 31
9	Page 4 of 20, Line 31
10	Page 2 of 20, Line 30
12	Page 17 of 20, Line 100
13	Page 20 of 20, Line 11
14	Page 4 of 20, Line 34 + Line 36 + Line 37 + Line 38
15	Line 11 + Line 12 + Line 13 + Line 14
16	Line 4 + Line 15
17	FY 2017 Plan Revenue Requirement as filed on March 21, 2016
18	Line 16(a) - Line 17(a)

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2017 Actual Incremental Capital Investment

Line No.				Fiscal Year 2017 (a)
	Capital Additions Allowance			
	Non-Discretionary Capital			
1	Non-Discretionary Additions	Attachment PSA-1, Page 3, Table 1		$28,593,675
	Discretionary Capital			
2	Lesser of Actual Cumulative Discretionary Capital Additions or Spending, or Approved Spending	Page 15 of 20, Line 12		$46,895,663
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 2		$75,489,338
	Depreciable Net Capital Included in Rate Base			
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		$75,489,338
5	Retirements		1/	$22,244,993
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Column (b) = Prior Year Line 6		$53,244,346
	Change in Net Capital Included in Rate Base			
7	Capital Included in Rate Base	Line 3		$75,489,338
8	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant		$43,031,774
9	Incremental Depreciable Amount	Column (a) = Line 7 - Line 8; Column (b) = Prior Year Line 9		$32,457,565
10	Total Cost of Removal	Attachment PSA-1, Page 4, Table 2		$7,806,949
11	**Total Net Plant in Service**	**Line 9 + Line 10**		**$40,264,513**
	Deferred Tax Calculation:			
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323		3.40%
13	Tax Depreciation	Page 3 of 20, Line 21		$58,425,852
14	Cumulative Tax Depreciation	Prior Year Line 14 + Current Year Line 13		$58,425,852
15	Book Depreciation	Column (a) = Line 6 * Line 12 * 50%; Column (b) = Line 6 * Line 12		$905,154
16	Cumulative Book Depreciation	Prior Year Line 16 + Current Year Line 15		$905,154
17	Cumulative Book / Tax Timer	Line 14 - Line 16		$57,520,698
18	Effective Tax Rate			35.00%
19	Deferred Tax Reserve	Line 17 * Line 18		$20,132,244
20	Less: FY 2017 Federal NOL	Page 19 of 20, Line11(l)		$0
21	Net Deferred Tax Reserve	Line 19 + Line 20		$20,132,244
	Rate Base Calculation:			
22	Cumulative Incremental Capital Included in Rate Base	Line 11		$40,264,513
23	Accumulated Depreciation	-Line 16		($905,154)
24	Deferred Tax Reserve	-Line 21		($20,132,244)
25	Year End Rate Base	Sum of Lines 22 through 24		$19,227,115
	Revenue Requirement Calculation:			
26	Average Rate Base	Column (a) = Current Year Line 27 ÷ 2; Column (b) = (Prior Year Line 27 + Current Year Line 27) ÷ 2		$9,613,558
27	Pre-Tax ROR		2/	9.68%
28	Return and Taxes	Line 26 * Line 27		$930,592
29	Book Depreciation	Line 15		$905,154
30	**Annual Revenue Requirement**	**Line 28 + Line 29**		**$1,835,746**

1/ Actual Retirements
2/ Weighted Average Cost of Capital per Settlement Agreement R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

The Narragansett Electric Company
d/b/a National Grid
Electric Infrastructure, Safety, and Reliability (ISR) Plan
Calculation of Tax Depreciation and Repairs Deduction on FY2017 Incremental Capital Investments

Line No.				Fiscal Year 2017 (a)
	Capital Repairs Deduction			
1	Plant Additions	Page 2 of 20, Line 3		$75,489,338
2	Capital Repairs Deduction Rate	Per Tax Department	1/	22.70%
3	Capital Repairs Deduction	Line 1 * Line 2		$17,136,080
	Bonus Depreciation			
4	Plant Additions	Line 1		$75,489,338
5	Less Capital Repairs Deduction	Line 3		$17,136,080
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$58,353,258
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department		99.00%
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$57,769,726
9	Bonus Depreciation Rate (April 2016 - December 2016)	1 * 75% * 50%		37.50%
10	Bonus Depreciation Rate (January 2017 - March 2017)	1 * 25% * 50%		12.50%
11	Total Bonus Depreciation Rate	Line 9 + Line 10		50.00%
12	Bonus Depreciation	Line 8 * Line 11		$28,884,863
	Remaining Tax Depreciation			
13	Plant Additions	Line 1		$75,489,338
14	Less Capital Repairs Deductions	Line 3		$17,136,080
15	Less Bonus Depreciation	Line 12		$28,884,863
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$29,468,395
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%
18	Remaining Tax Depreciation	Line 16 * Line 17		$1,105,065
19	FY17 Loss incurred due to retirements	Per Tax Department		$3,492,895
20	Cost of Removal	Page 2 of 20, Line 10		$7,806,949
21	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19, and 20		$58,425,852

1/ Capital Repairs percentage is based on a three year average, 2012, 2013 and 2014 of electric property qualifying for the repairs deduction as a percentage of total annual plant additions.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2016 Actual Incremental Capital Investment

Line No.				Fiscal Year 2016 (a)	Fiscal Year 2017 (b)
	Capital Investment Allowance				
1	*Non-Discretionary Capital*	Per RIPUC Docket No. 4539		$35,964,438	$0
1a	Work Order Write Off Adjustment	Per Company's books		$672,272	$0
	Discretionary Capital				
2	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4539		$35,488,464	$0
2a	Work Order Write Off Adjustment	Per Company's books		($121,728)	$0
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 1a + Line 2 + Line 2a		$72,003,445	$0
	Depreciable Net Capital Included in Rate Base				
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		$72,003,445	$0
5	Retirements		1/	$28,489,814	$0
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Column (b) = Prior Year Line 6		$43,513,631	$43,513,631
	Change in Net Capital Included in Rate Base				
7	Capital Included in Rate Base	Line 3		$72,003,445	$0
8	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant		$43,031,774	$0
9	Incremental Capital Amount	Column (a) = Line 7 - Line 8; Column (b) = Prior Year Line 9		$28,971,671	$28,971,671
10	Cost of Removal	Per RIPUC Docket No. 4539	2/	$8,192,983	$8,192,983
10a	Work Order Write Off Adjustment	Per Company's books		($19,884)	($19,884)
11	**Total Net Plant in Service**	**Line 9 + Line 10 + Line 10a**		**$37,144,770**	**$37,144,770**
	Deferred Tax Calculation:				
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323		3.40%	3.40%
13	Vintage Year Tax Depreciation:				
14	2016 Spend	Page 5 of 20, Line 21		$60,569,127	$1,868,699
15	Cumulative Tax Depreciation	Prior Year Line 15 + Current Year Line 14		$60,569,127	$62,437,826
16	Book Depreciation	Column (a) = Line 6 * Line 12 * 50%; Column (b) = Line 6 * Line 12		$739,732	$1,479,463
17	Cumulative Book Depreciation	Prior Year Line 17 + Current Year Line 16		$739,732	$2,219,195
18	Cumulative Book / Tax Timer	Line 15 - Line 17		$59,829,395	$60,218,631
19	Effective Tax Rate			35.00%	35.00%
20	Deferred Tax Reserve	Line 18 * Line 19		$20,940,288	$21,076,521
21	Less: FY 2016 Federal NOL	Page 19 of 20, Line11(k)		($10,693,796)	($10,693,796)
22	Net Deferred Tax Reserve	Line 20 + Line 21		$10,246,492	$10,382,725
	Rate Base Calculation:				
23	Cumulative Incremental Capital Included in Rate Base	Line 11		$37,144,770	$37,144,770
24	Accumulated Depreciation	-Line 17		($739,732)	($2,219,195)
25	Deferred Tax Reserve	-Line 22		($10,246,492)	($10,382,725)
26	Year End Rate Base	Sum of Lines 23 through 25		$26,158,546	$24,542,850
	Revenue Requirement Calculation:				
27	Average Rate Base	Column (a) = Current Year Line 27 ÷ 2; Column (b) = (Prior Year Line 27 + Current Year Line 27) ÷ 2		$13,079,273	$25,350,698
28	Pre-Tax ROR		3/	9.68%	9.68%
29	Return and Taxes	Line 27 * Line 28		$1,266,074	$2,453,948
30	Book Depreciation	Line 16		$739,732	$1,479,463
31	**Annual Revenue Requirement**	**Line 29 + Line 30**		**$2,005,805**	**$3,933,411**
32	As Approved in RIPUC Docket No. 4539			$2,048,986	$4,017,908
33	Transmission-related NOL adjustment (True-up included in RIPUC Docket No. 4682)			($169,161)	($338,321)
34	True-Up to reflect actual NOL deferred taxes generated for FY 2016			$193,024	$386,048
35	Work Order Write Off Adjustment (True-up included in RIPUC Docket No. 4682)			$29,263	$57,675
36	True-Up to reflect actual Bonus Depreciation for FY 2016			$5,581	$10,744
37	True-Up to reflect actual Capital Repairs Deduction for FY 2016			($41,807)	($80,478)
38	True-Up to reflect actual loss incurred due to retirements for FY 2016			($60,082)	($120,165)

1/ Actual Retirements

2/ Actual Cost of Removal

3/ Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY2016 Incremental Capital Investments

Line No.				Fiscal Year 2016 (a)	Fiscal Year 2017 (a)
	Capital Repairs Deduction				
1	Plant Additions	Page 4 of 20, Line 3		$72,003,445	
2	Capital Repairs Deduction Rate	Per Tax Department	1/	29.67%	
3	Capital Repairs Deduction	Line 1 * Line 2		$21,361,075	
	Bonus Depreciation				
4	Plant Additions	Line 1		$72,003,445	
5	Less Capital Repairs Deduction	Line 3		$21,361,075	
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$50,642,370	
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department		97.77%	
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$49,513,045	
9	Bonus Depreciation Rate (April 2015 - December 2015)	1 * 75% * 50%		37.50%	
10	Bonus Depreciation Rate (January 2016 - March 2016)	1 * 25% * 50%		12.50%	
11	Total Bonus Depreciation Rate	Line 9 + Line 10		50.00%	
12	Bonus Depreciation	Line 8 * Line 11		$24,756,523	
	Remaining Tax Depreciation				
13	Plant Additions	Line 1		$72,003,445	
14	Less Capital Repairs Deduction	Line 3		$21,361,075	
15	Less Bonus Depreciation	Line 12		$24,756,523	
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$25,885,847	$25,885,847
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%	7.219%
18	Remaining Tax Depreciation	Line 16 * Line 17		$970,719	$1,868,699
19	FY16 Loss incurred due to retirements	Per Tax Department		$5,307,711	
20	Cost of Removal	Page 4 of 20, Line 10 + Line 10a		$8,173,099	
21	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19, and 20		$60,569,127	$1,868,699

1/ Capital Repairs percentage is based on the actual results of the FY 2016 tax return.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2015 Actual Incremental Capital Investment

Line No.				Fiscal Year 2015 (a)	Fiscal Year 2016 (b)	Fiscal Year 2017 (c)
	Capital Investment Allowance					
1	*Non-Discretionary Capital*	Per RIPUC Docket No. 4473		$22,246,664	$0	$0
1a	Work Order Write Off Adjustment	Per Company's books		$ (268,138)		
	Discretionary Capital					
2	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4473		$54,410,377	$0	$0
2a	Work Order Write Off Adjustment	Per Company's books		$ (48,499)		
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 1a + Line 2 + Line 2a		$76,340,403	$0	$0
	Depreciable Net Capital Included in Rate Base					
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		$76,340,403	$0	$0
5	Retirements		1/	$15,666,095	$0	$0
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Column (b) = Prior Year Line 6		$60,674,308	$60,674,308	60,674,308
	Change in Net Capital Included in Rate Base					
7	Capital Included in Rate Base	Line 3		$76,340,403	$0	$0
8	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant		$43,031,774	$0	$0
9	Incremental Capital Amount	Column (a) = Line 7 - Line 8; Column (b) = Prior Year Line 9		$33,308,629	$33,308,629	$33,308,629
10	Cost of Removal	Per RIPUC Docket No. 4473	2/	$6,988,398	$6,988,398	$6,988,398
10a	Work Order Write Off Adjustment	Per Company's books		$22,398	$22,398	$22,398
11	**Total Net Plant in Service**	**Line 9 + Line 10 + Line 10a**		**$40,319,425**	**$40,319,425**	**$40,319,425**
	Deferred Tax Calculation:					
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323		3.40%	3.40%	3.40%
13	Vintage Year Tax Depreciation:					
14	2015 Spend	Page 7 of 20, Line 22		$71,871,022	$2,120,892	$1,961,656
15	Cumulative Tax Depreciation	Prior Year Line 15 + Current Year Line 14		$71,871,022	$73,991,914	75,953,570
16	Book Depreciation	Column (a) = Line 6 * Line 12 * 50%; Column (b) = Line 6 * Line 12		$1,031,463	$2,062,926	$2,062,926
17	Cumulative Book Depreciation	Prior Year Line 17 + Current Year Line 16		$1,031,463	$3,094,390	$5,157,316
18	Cumulative Book / Tax Timer	Line 15 - Line 17		$70,839,559	$70,897,524	$ 70,796,254
19	Effective Tax Rate			35.00%	35.00%	35.00%
20	Deferred Tax Reserve	Line 18 * Line 19		$24,793,846	$24,814,134	$24,778,689
21	Less: FY 2015 Federal NOL	Page 19 of 20, Line 11(j)		($8,148,936)	($8,148,936)	($8,148,936)
22	Net Deferred Tax Reserve	Line 20 + Line 21		$16,644,909	$16,665,197	$16,629,752
	Rate Base Calculation:					
23	Cumulative Incremental Capital Included in Rate Base	Line 11		$40,319,425	$40,319,425	$40,319,425
24	Accumulated Depreciation	-Line 17		($1,031,463)	($3,094,390)	($5,157,316)
25	Deferred Tax Reserve	-Line 22		($16,644,909)	($16,665,197)	($16,629,752)
26	Year End Rate Base	Sum of Lines 23 through 25		$22,643,053	$20,559,839	$18,532,357
	Revenue Requirement Calculation:					
27	Average Rate Base	Column (a) = Current Year Line 27 ÷ 2; Column (b) = (Prior Year Line 27 + Current Year Line 27) ÷ 2		$11,321,526	$21,601,446	$19,546,098
28	Pre-Tax ROR		3/	9.68%	9.68%	9.68%
29	Return and Taxes	Line 27 * Line 28		$1,095,924	$2,091,020	$1,892,062
30	Book Depreciation	Line 16		$1,031,463	$2,062,926	$2,062,926
31	**Annual Revenue Requirement**	**Line 29 + Line 30**		**$2,127,387**	**$4,153,946**	**$3,954,989**

1/ Actual Retirements

2/ Actual Cost of Removal

3/ Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY2015 Incremental Capital Investments

Line No.				Fiscal Year 2015 (a)	Fiscal Year 2016 (b)	Fiscal Year 2017 (c)
	Capital Repairs Deduction					
1	Plant Additions	Page 6 of 20, Line 3		$76,340,403		
2	Capital Repairs Deduction Rate	Per Tax Department	1/	23.10%		
3	Capital Repairs Deduction	Line 1 * Line 2		$17,634,633		
	Bonus Depreciation					
4	Plant Additions	Line 1		$76,340,403		
5	Less Capital Repairs Deduction	Line 3		$17,634,633		
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$58,705,770		
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department		99.91%		
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$58,652,935		
9	Bonus Depreciation Rate (April 2014 - December 2014)	1 * 75% * 50%		37.50%		
10	Bonus Depreciation Rate (January 2015 - March 2015)	1 * 25% * 50%		12.50%		
11	Total Bonus Depreciation Rate	Line 9 + Line 10		50.00%		
12	Bonus Depreciation	Line 8 * Line 11		$29,326,468		
	Remaining Tax Depreciation					
13	Plant Additions	Line 1		$76,340,403		
14	Less Capital Repairs Deduction	Line 3		$17,634,633		
15	Less Bonus Depreciation	Line 12		$29,326,468		
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$29,379,302	$29,379,302	$29,379,302
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%	7.219%	6.677%
18	Remaining Tax Depreciation	Line 16 * Line 17		$1,101,724	$2,120,892	$1,961,656
19	481(a) adjustment for partial retirements	Per Tax Department		$14,395,754		
20	FY15 Loss incurred due to retirements	Per Tax Department		$2,401,647		
21	Cost of Removal	Page 6 of 20, Line 10 + Line 10a		$7,010,796		
22	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18,19, 20, and 21		$71,871,022	$2,120,892	$1,961,656

1/ Capital Repairs percentage is based on the actual results of the FY 2015 tax return.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2014 Actual Incremental Capital Investment

Line No.				Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)	Fiscal Year 2017 (d)
	Capital Investment Allowance						
1	*Non-Discretionary Capital*	Per RIPUC Docket No. 4382		$6,923,860	$0	$0	$0
1a	Work Order Write Off Adjustment	Per Company's books		($472,942)			
	Discretionary Capital						
2	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4382		$6,400,406	$0	$0	$0
2a	Work Order Write Off Adjustment	Per Company's books		($8,965)			
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 1a + Line 2 + Line 2a		$12,842,359	$0	$0	$0
	Depreciable Net Capital Included in Rate Base						
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		$12,842,359	$0	$0	$0
5	Retirements	Page 14 of 20, Line 9(c)	1/	($4,165,367)	$0	$0	$0
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Column (b) = Prior Year Line 6		$17,007,726	17,007,726	17,007,726	17,007,726
	Change in Net Capital Included in Rate Base						
7	Capital Included in Rate Base	Line 3		$12,842,359	$0	$0	$0
8	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant	2/	$7,173,397	$0	$0	$0
9	Incremental Capital Amount	Column (a) = Line 7 - Line 8; Column (b) = Prior Year Line 9		$5,668,962	$5,668,962	$5,668,962	$5,668,962
10	Total Cost of Removal	Page 14 of 20, Line 6(c)		($887,841)	($887,841)	($887,841)	($887,841)
10a	Work Order Write Off Adjustment	Per Company's books		($37,062)	($37,062)	($37,062)	($37,062)
11	**Total Net Plant in Service**	**Line 9 + Line 10 + Line 10a**		**$4,744,059**	**$4,744,059**	**$4,744,059**	**$4,744,059**
	Deferred Tax Calculation:						
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323		3.40%	3.40%	3.40%	3.40%
13	Vintage Year Tax Depreciation:						
14	2014 Spend	Page 9 of 20, Line 20		$7,826,326	$306,845	$283,808	$262,555
15	Cumulative Tax Depreciation	Prior Year Line 15 + Current Year Line 14		$7,826,326	$8,133,171	$8,416,979	$8,679,534
16	Book Depreciation	Column (a) = Line 6 * Line 12 * 50%; Column (b) = Line 6 * Line 12		$289,131	$578,263	$578,263	$578,263
17	Cumulative Book Depreciation	Prior Year Line 17 + Current Year Line 16		$289,131	$867,394	$1,445,657	$2,023,919
18	Cumulative Book / Tax Timer	Line 15 - Line 17		$7,537,194	$7,265,777	$6,971,322	$6,655,614
19	Effective Tax Rate			35.00%	35.00%	35.00%	35.00%
20	Deferred Tax Reserve	Line 18 * Line 19		$2,638,018	$2,543,022	$2,439,963	$2,329,465
21	Less: FY 2014 Federal NOL	Page 19 of 20, Line 11(i)		($1,200,808)	($1,200,808)	($1,200,808)	($1,200,808)
22	Net Deferred Tax Reserve	Line 20 + Line 21		$1,437,210	$1,342,214	$1,239,155	$1,128,657
	Rate Base Calculation:						
23	Cumulative Incremental Capital Included in Rate Base	Line 11		$4,744,059	$4,744,059	$4,744,059	$4,744,059
24	Accumulated Depreciation	-Line 17		($289,131)	($867,394)	($1,445,657)	($2,023,919)
25	Deferred Tax Reserve	-Line 22		($1,437,210)	($1,342,214)	($1,239,155)	($1,128,657)
26	Year End Rate Base	Sum of Lines 23 through 25		$3,017,717	$2,534,451	$2,059,247	$1,591,482
	Revenue Requirement Calculation:						
27	Average Rate Base	Col (a) = Line 26 * 23.23%; Col (b) = (Prior Year Line 26 + Current Year Line 26)/2	3/	$670,654	$2,776,084	$2,296,849	$1,825,365
28	Pre-Tax ROR		4/	9.68%	9.68%	9.68%	9.68%
29	Return and Taxes	Line 27 * Line 28		$64,919	$268,725	$222,335	$176,695
30	Book Depreciation	Line 16		$289,131	$578,263	$578,263	$578,263
31	**Annual Revenue Requirement**	**Line 29 + Line 30**		**$354,051**	**$846,988**	**$800,598**	**$754,958**

1/ Actual Retirements

2/ Depreciation Expense has been prorated for 2 months (February - March 2014)

3/ 23.23% per RIPUC Docket No. 4382 (FY 2014 Elec ISR reconciliation), Attachment WRR-1-Revised, Page 12.

4/ Weighted Average Cost of Capital as approved in RIPUC Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY2014 Incremental Capital Investments

Line No.				Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)	Fiscal Year 2017 (d)
	Capital Repairs Deduction						
1	Plant Additions	Page 8 of 20, Line 3		$12,842,359			
2	Capital Repairs Deduction Rate	Per Tax Department	1/	34.46%			
3	Capital Repairs Deduction	Line 1 * Line 2		$4,425,477			
	Bonus Depreciation						
4	Plant Additions	Line 1		$12,842,359			
5	Less Capital Repairs Deduction	Line 3		$4,425,477			
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$8,416,882			
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department		99.00%			
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$8,332,713			
9	Bonus Depreciation Rate (April 2013 - December 2013)	1 * 75% * 50%		37.50%			
10	Bonus Depreciation Rate (January 2014 - March 2014)	1 * 25% * 50%		12.50%			
11	Total Bonus Depreciation Rate	Line 9 + Line 10		50.00%			
12	Bonus Depreciation	Line 8 * Line 11		$4,166,357			
	Remaining Tax Depreciation						
13	Plant Additions	Line 1		$12,842,359			
14	Less Capital Repairs Deduction	Line 3		$4,425,477			
15	Less Bonus Depreciation	Line 12		$4,166,357			
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$4,250,525	$4,250,525	$4,250,525	$4,250,525
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%	7.219%	6.677%	6.177%
18	Remaining Tax Depreciation	Line 16 * Line 17		$159,395	$ 306,845	$ 283,808	$262,555
19	Cost of Removal	Page 8 of 20, Line 10 + Line 10a		($924,903)			
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18 and 19		$7,826,326	$306,845	$283,808	$262,555

1/ Capital Repairs percentage is based on the FY 2014 tax return.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2013 Actual Incremental Capital Investment

Line No.				Fiscal Year 2013 (a)	Fiscal Year 2014 (b)	Fiscal Year 2015 (c)	Fiscal Year 2016 (d)	Fiscal Year 2017 (e)
	Capital Additions Allowance							
	Non-Discretionary Capital							
1	Non-Discretionary Additions	Per RIPUC Docket No. 4307		($5,184,396)	$0	$0	$0	$0
1a	Work Order Write Off Adjustment	Per Company's books		($576,955)	$0	$0	$0	$0
	Discretionary Capital							
2	Lesser of Actual Discretionary Capital Additions or Spending or Approved Spending	Per RIPUC Docket No. 4307		($1,850,463)	$0	$0	$0	$0
2a	Work Order Write Off Adjustment	Per Company's books		($207,197)	$0	$0	$0	$0
3	Total Allowed Capital Included in Rate Base in Current Year	Line 1 + Line 1a + Line 2 + Line 2a		($7,819,012)	$0	$0	$0	$0
	Depreciable Net Capital Included in Rate Base							
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		($7,819,012)	$0	$0	$0	$0
5	Retirements			$5,838,935	$0	$0	$0	$0
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Columns (b), (c), & (d) = Prior Year Line 6		($13,657,947)	($13,657,947)	($13,657,947)	($13,657,947)	($13,657,947)
	Change in Net Capital Included in Rate Base							
7	Capital Included in Rate Base	Line 3		($7,819,012)	$0	$0	$0	$0
8	Depreciation Expense	As approved per R.I.P.U.C. Docket No. 4065, excluding general plant		$0	$0	$0	$0	$0
9	Incremental Capital Amount	Column (a) = Line 7 - Line 8; Columns (b), (c) & (d) = Prior Year Line 9		($7,819,012)	($7,819,012)	($7,819,012)	($7,819,012)	($7,819,012)
10	Total Cost of Removal			($1,895,059)	($1,895,059)	($1,895,059)	($1,895,059)	($1,895,059)
10a	Work Order Write Off Adjustment	Per Company's books		($106,751)	($106,751)	($106,751)	($106,751)	($106,751)
11	**Total Net Plant in Service**	**Line 9 + Line 10 + Line 10a**		**($9,820,822)**	**($9,820,822)**	**($9,820,822)**	**($9,820,822)**	**($9,820,822)**
	Deferred Tax Calculation:							
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4065		3.40%	3.40%	3.40%	3.40%	3.40%
13	Tax Depreciation	Page 11 of 20, Line 20		($6,531,672)	($246,695)	($228,173)	($211,087)	($195,230)
14	Cumulative Tax Depreciation	Prior Year Line 13 + Current Year Line 14		($6,531,672)	($6,778,367)	($7,006,540)	($7,217,627)	($7,412,857)
15	Book Depreciation	Column (a) = Line 6 * Line 12 * 50%; Columns (b), (c) & (d) = Line 6 * Line 12		($232,185)	($464,370)	($464,370)	($464,370)	($464,370)
16	Cumulative Book Depreciation	Prior Year Line 16 + Current Year Line 15		($232,185)	($696,555)	($1,160,925)	($1,625,296)	($2,089,666)
17	Cumulative Book / Tax Timer	Line 14 - Line 16		($6,299,487)	($6,081,812)	($5,845,615)	($5,592,331)	($5,323,191)
18	Effective Tax Rate			35.00%	35.00%	35.00%	35.00%	35.00%
19	Deferred Tax Reserve	Line 17 * Line 18		($2,204,820)	($2,128,634)	($2,045,965)	($1,957,316)	($1,863,117)
20	Less: FY 2013 Federal NOL	Page 19 of 20, Line 11(h)		($2,342,381)	($2,342,381)	($2,342,381)	($2,342,381)	($2,342,381)
21	Net Deferred Tax Reserve	Line 19 + Line 20		($4,547,202)	($4,471,016)	($4,388,347)	($4,299,697)	($4,205,498)
	Rate Base Calculation:							
22	Cumulative Incremental Capital Included in Rate Base	Line 11		($9,820,822)	($9,820,822)	($9,820,822)	($9,820,822)	($9,820,822)
23	Accumulated Depreciation	-Line 16		$232,185	$696,555	$1,160,925	$1,625,296	$2,089,666
24	Deferred Tax Reserve	-Line 21		$4,547,202	$4,471,016	$4,388,347	$4,299,697	$4,205,498
25	Year End Rate Base	Sum of Lines 22 through 24		($5,041,435)	($4,653,251)	($4,271,550)	($3,895,829)	($3,525,658)
	Revenue Requirement Calculation:							
26	Average Rate Base	Column (a) = Current Year Line 25 ÷ 2; Column (b) = (Prior Year Line 25 + Current Year Line 25) ÷ 2		($2,520,717)	($4,847,343)	($4,462,400)	($4,083,689)	($3,710,743)
27	Pre-Tax ROR		1/	9.84%	9.68%	9.68%	9.68%	9.68%
28	Return and Taxes	Line 26 * Line 27		($248,039)	($469,223)	($431,960)	($395,301)	($359,200)
29	Book Depreciation	Line 15		($232,185)	($464,370)	($464,370)	($464,370)	($464,370)
30	Property Taxes	Year 1 = $0, then Prior Year (Line 11 - Line 16) * Current Year Effective Property Tax rate	2/	$0	($350,952)	($374,039)	($324,300)	($284,593)
31	**Annual Revenue Requirement**	**Sum of Lines 28 through 30**		**($480,224)**	**($1,284,545)**	**($1,270,370)**	**($1,183,971)**	**($1,108,163)**

1/ Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

2/ FY 2017 effective property tax rate of 3.47% per Page 17 of 20, Line 71(h)

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY2013 Incremental Capital Investments

				Fiscal Year 2013 (a)	Fiscal Year 2014 (b)	Fiscal Year 2015 (c)	Fiscal Year 2016 (d)	Fiscal Year 2017 (e)
	Capital Repairs Deduction							
1	Plant Additions	Page 10 of 20, Line 3		($7,819,012)				
2	Capital Repairs Deduction Rate		1/	12.59%				
3	Capital Repairs Deduction	Line 1 * Line 2		($984,414)				
	Bonus Depreciation							
4	Plant Additions	Line 1		($7,819,012)				
5	Less Capital Repairs Deduction	Line 3		($984,414)				
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		($6,834,598)				
7	Percent of Plant Eligible for Bonus Depreciation			100.00%				
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		($6,834,598)				
9	Bonus Depreciation Rate (April 2012 - December 2012)	1 * 75% * 50%		37.50%				
10	Bonus Depreciation Rate (January 2013 - March 2013)	1 * 25% * 50%		12.50%				
11	Total Bonus Depreciation Rate	Line 9 + Line 10		50.00%				
12	Bonus Depreciation	Line 8 * Line 11		($3,417,299)				
	Remaining Tax Depreciation							
13	Plant Additions	Line 1		($7,819,012)				
14	Less Capital Repairs Deduction	Line 3		($984,414)				
15	Less Bonus Depreciation	Line 12		($3,417,299)				
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		($3,417,299)	($3,417,299)	($3,417,299)	($3,417,299)	($3,417,299)
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%	7.219%	6.677%	6.177%	5.713%
18	Remaining Tax Depreciation	Line 16 * Line 17		($128,149)	($246,695)	($228,173)	($211,087)	($195,230)
19	Cost of Removal	Page 10 of 20, Line 10 + Line 10a		($2,001,810)				
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19		($6,531,672)	($246,695)	($228,173)	($211,087)	($195,230)

1/ Capital Repairs percentage is based on the FY 2013 tax return.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Revenue Requirement on FY 2012 Actual Incremental Capital Investment

Line No.				Fiscal Year 2012 (a)	Fiscal Year 2013 (b)	Fiscal Year 2014 (c)	Fiscal Year 2015 (d)	Fiscal Year 2016 (e)	Fiscal Year 2017 (f)
	Capital Additions Allowance								
	Non-Discretionary Capital								
1	Non-Discretionary	Per RIPUC Docket No. 4218		($4,019,686)	$0	$0	$0	$0	$0
	Discretionary Capital								
2	Lesser of Actual Discretionary Capital Additions or Spending or Approved Spending	Per RIPUC Docket No. 4218		$4,163,942	$0	$0	$0	$0	$0
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 2		$144,256	$0	$0	$0	$0	$0
	Depreciable Net Capital Included in Rate Base								
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3		$144,256	$0	$0	$0	$0	$0
5	Retirements			$19,938	$0	$0	$0	$0	$0
6	Net Depreciable Capital Included in Rate Base	Column (a) = Line 4 - Line 5; Columns (b) through (h) = Prior Year Line 6		$124,318	$124,318	$124,318	$124,318	$124,318	$124,318
	Change in Net Capital Included in Rate Base								
7	Incremental Capital Amount	Column (a) = Line 4, Columns (b) through (h) = Prior Year Line 7		$144,256	$144,256	$144,256	$144,256	$144,256	$144,256
8	Cost of Removal			($771,131)	($771,131)	($771,131)	($771,131)	($771,131)	($771,131)
9	**Total Net Plant in Service**	**Line 7 + Line 8**		**($626,875)**	**($626,875)**	**($626,875)**	**($626,875)**	**($626,875)**	**($626,875)**
	Deferred Tax Calculation:								
10	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4065		3.40%	3.40%	3.40%	3.40%	3.40%	3.40%
11	Tax Depreciation	Page 13 of 20, Line 20		($654,965)	$2,107	$1,949	$1,803	$1,667	$1,542
12	Cumulative Tax Depreciation	Prior Year Line 12 + Current Year Line 11		($654,965)	($652,858)	($650,909)	($649,107)	($647,439)	($645,897)
13	Book Depreciation	Column (a) = -Line 6 * Line 10 * 50%; Columns (b) through (h)= Line 6 * Line 10		($2,113)	($4,227)	($4,227)	($4,227)	($4,227)	($4,227)
14	Cumulative Book Depreciation	Prior Year Line 14 + Current Year Line 13		($2,113)	($6,340)	($10,567)	($14,794)	($19,021)	($23,247)
15	Cumulative Book / Tax Timer	Line 12 - Line 14		($652,852)	($646,518)	($640,342)	($634,313)	($628,419)	($622,650)
16	Effective Tax Rate			35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
17	Deferred Tax Reserve	Line 15 * Line 16		($228,498)	($226,281)	($224,120)	($222,009)	($219,947)	($217,927)
18	Less: FY 2013 Federal NOL	Page 19 of 20, Line 11(g)		($3,434,992)	($3,434,992)	($3,434,992)	($3,434,992)	($3,434,992)	($3,434,992)
19	Net Deferred Tax Reserve	Line 17 + Line 18		($3,663,490)	($3,661,274)	($3,659,112)	($3,657,002)	($3,654,939)	($3,652,920)
	Rate Base Calculation:								
20	Cumulative Incremental Capital Included in Rate Base	Line 9		($626,875)	($626,875)	($626,875)	($626,875)	($626,875)	($626,875)
21	Accumulated Depreciation	-Line 14		$2,113	$6,340	$10,567	$14,794	$19,021	$23,247
22	Deferred Tax Reserve	-Line 19		$3,663,490	$3,661,274	$3,659,112	$3,657,002	$3,654,939	$3,652,920
23	Year End Rate Base	Sum of Lines 20 through 22		$3,038,729	$3,040,739	$3,042,804	$3,044,921	$3,047,085	$3,049,292
	Revenue Requirement Calculation:								
24	Average Rate Base	(Prior Year Line 23 + Current Year Line 23) ÷2		$1,519,364	$3,039,734	$3,041,771	$3,043,862	$3,046,003	$3,048,188
25	Pre-Tax ROR		1/	9.30%	9.84%	9.68%	9.68%	9.68%	9.68%
26	Return and Taxes	Line 24 * Line 25		$141,301	$299,110	$294,443	$294,646	$294,853	$295,065
27	Book Depreciation	Line 13		($2,113)	($4,227)	($4,227)	($4,227)	($4,227)	($4,227)
28	Property Taxes	Year 1 = $0, then Prior Year (Line 9 - Line 14) * Current Year Effective Property Tax rate	2/	$0	($21,523)	($22,710)	($24,344)	($23,626)	($21,108)
29	**Annual Revenue Requirement**	**Sum of Lines 26 through 28**		**$139,188**	**$273,360**	**$267,506**	**$266,075**	**$267,000**	**$269,730**

1/ Weighted Average Cost of Capital per Settlement Agreement R.I.P.U.C. Docket No. 4323

	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	4.96%	2.48%		2.48%
Short Term Debt	0.76%	0.79%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.17%	2.51%	9.68%

2/ FY 2017 effective property tax rate of 3.47% per Page 17 of 20, Line 71(h)

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY2012 Incremental Capital Investments

Line No.				Fiscal Year 2012 (a)	Fiscal Year 2013 (b)	Fiscal Year 2014 (c)	Fiscal Year 2015 (d)	Fiscal Year 2016 (e)	Fiscal Year 2017 (f)
	Capital Repairs Deduction								
1	Plant Additions	Page 12 of 20, Line 3		$144,256					
2	Capital Repairs Deduction Rate	Per Tax Department	1/	21.05%					
3	Capital Repairs Deduction	Line 1 * Line 2		$30,366					
	Bonus Depreciation								
4	Plant Additions	Line 1		$144,256					
5	Less Capital Repairs Deduction	Line 3		$30,366					
6	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5		$113,890					
7	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department	2/	85.00%					
8	Plant Eligible for Bonus Depreciation	Line 6 * Line 7		$96,807					
9	Bonus Depreciation Rate (April 2011 - December 2011)	1 * 75% * 100%		75.00%					
10	Bonus Depreciation Rate (January 2012 - March 2012)	1 * 25% * 50%		12.50%					
11	Total Bonus Depreciation Rate	Line 9 + Line 10		87.50%					
12	Bonus Depreciation	Line 8 * Line 11		$84,706					
	Remaining Tax Depreciation								
13	Plant Additions	Line 1		$144,256					
14	Less Capital Repairs Deduction	Line 3		$30,366					
15	Less Bonus Depreciation	Line 12		$84,706					
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15		$29,184	$29,184	$29,184	$29,184	$29,184	$29,184
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946		3.750%	7.219%	6.677%	6.177%	5.713%	5.285%
18	Remaining Tax Depreciation	Line 16 * Line 17		$1,094	$2,107	$1,949	$1,803	$1,667	$1,542
19	Cost of Removal	Page 12 of 20, Line 8		($771,131)					
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19		($654,965)	$2,107	$1,949	$1,803	$1,667	$1,542

1/ Per Docket 4307 FY 2013 Electric ISR Reconciliation Filing at Attachment WRR-1, Page 8, Line 2
2/ Since not all property additions qualify for bonus depreciation and because a project must be started after the beginning of the bonus period, January 1, 2008, an estimate of 85% is used rather than 100%.

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2012 - 2014 Incremental Capital Investment Summary

Line No.			Actual Fiscal Year 2012 (a)	Actual Fiscal Year 2013 (b)	Fiscal Year 2014 (c)
	Capital Investment				
1	ISR - Eligible Capital Investment	Col (a) =FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b) = FY 2013 ISR Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconcilation Filing Docket No. 4382	$48,946,456	$44,331,141	$56,129,551
1a	Work Order Write Off Adjustment	Per Company's books	$0	($784,153)	($481,907)
2	ISR - Eligible Capital Additions included in Rate Base per R.I.P.U.C. Docket No. 4323	Schedule MDL-3-ELEC Page 53, Docket No. 4323: Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Col (c)= Line Note 3(e)	$48,802,200	$51,366,341	$42,805,284
3	Incremental ISR Capital Investment	Line 1 + Line 1a - Line 2	$144,256	($7,819,353)	$12,842,360
	Cost of Removal				
4	ISR - Eligible Cost of Removal	Col (a) =FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b)= FY 2013 Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconciliation Filing Docket No. 4382	$5,807,869	5,179,941	$5,007,992
4a	Work Order Write Off Adjustment	Per Company's books	$0	($106,751)	($37,062)
5	ISR - Eligible Cost of Removal in Rate Base per R.I.P.U.C. Docket No. 4323	Workpaper MDL-19-ELEC Page 2, Docket No. 4323: Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Line Note 3(e)	$6,579,000	$7,075,000	$5,895,833
6	Incremental Cost of Removal	Line 4 + Line 4a - Line 5	($771,131)	($2,001,810)	($924,903)
	Retirements				
7	ISR - Eligible Retirements/Actual	Col (a)= FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b) = FY 2013 ISR Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconciliation Filing Docket No. 4382	$7,740,446	$14,255,714	$3,299,874
8	ISR - Eligible Retirements/Estimated	Col (a)= FY 2012 ISR Proposal Filing Docket No. 4218; Col (b)= FY 2013 ISR Proposal Filing Docket No. 4307; Col (c) = Line 2 (c) * 17.44% Retirement rate per Docket 4323 (Workpaper MDL-19-ELEC Page 3)	$7,720,508	$8,416,779	$7,465,242
9	Incremental Retirements	Line 7 - Line 8	$19,938	$5,838,935	($4,165,367)

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
FY 2017 Capital Investment

Line No.	**Discretionary Capital**		**Actuals** (a)
1	Cumulative FY 2016 Discretionary Capital **ADDITIONS**	Docket No. 4539 FY16 Reconciliation Att. AST-1 Page 14, Line 3	$159,030,344
2	FY 2017 Discretionary Capital **ADDITIONS**	Attachment PSA-1, Page 3, Table 1	$46,895,663
3	Cumulative Actual Discretionary Capital Additions	Line 1 + Line 2	$205,926,007
4	Cumulative FY 2016 Discretionary Capital **SPENDING**	Docket No. 4539 FY16 Reconciliation Att. AST-1 Page 14, Line 6	$192,056,464
5	FY 2017 Discretionary Capital **SPENDING**	Attachment PSA-1, Page 5, Table 3	$48,266,492
6	Cumulative Actual Discretionary Capital Spending	Line 4 + Line 5	$240,322,956
			As Approved in Docket No. 4592
7	Cumulative FY 2016 Approved Discretionary Capital **SPENDING**	Docket No. 4539 FY16 Reconciliation Att. AST-1 Page 14, Line 9	$174,212,150
8	FY 2017 Approved Discretionary Capital **SPENDING**	Attachment PSA-1, Page 5, Table 3	$52,523,386
9	Cumulative Actual Approved Discretionary Capital Spending	Line 7 + Line 8	$226,735,536
			Total Allowed
10	Cumulative Allowed Discretionary Capital Included in Rate Base	Lesser of Line 3, Line 6, or Line 9	$205,926,007
11	Prior Year Cumulative Allowed Disretionary Capital Included in Rate Base	Docket No. 4539 FY16 Reconciliation Filing Att. AST-1, Page 14, Line 10	$159,030,344
12	**Total Allowed Discretionary Capital Included in Rate Base Current Year**	Line 10 - Line 11	**$46,895,663**

The Narragansett Electric Company
d/b/a National Grid
FY 2017 ISR Property Tax Recovery Adjustment
(000s)

Line		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
		RY End	ISR Additions	Non-ISR Add's	Total Add's	Bk Depr (1)	Retirements	COR	End of FY 2014
1	Plant In Service	$1,358,470	$9,275	$1,885	$11,160		$550		$1,370,180
2									
3	Accumulated Depr	$611,570				$7,498	$550	($828)	$618,789
4									
5	Net Plant	$746,900							$751,391
6									
7	Property Tax Expense	$29,743							$27,502
8									
9	Effective Prop tax Rate	3.98%							3.66%
10									
11									
12	**Effective tax Rate Calculation**	**End of FY 2014**	**ISR Additions**	**Non-ISR Add's**	**Total Add's**	**Bk Depr (1)**	**Retirements**	**COR**	**End of FY 2015**
13									
14	Plant In Service	$1,370,180	$76,340	$5,801	$82,141		($15,666)		$1,436,655
15									
16	Accumulated Depr	$618,789				$46,514	($15,666)	($6,988)	$642,649
17									
18	Net Plant	$751,391							$794,006
19									
20	Property Tax Expense	$27,502							$32,549
21									
22	Effective Prop tax Rate	3.66%							4.10%
23									
24	**Effective tax Rate Calculation**	**End of FY 2015**	**ISR Additions**	**Non-ISR Add's**	**Total Add's**	**Bk Depr (1)**	**Retirements**	**COR**	**End of FY 2016**
25									
26	Plant In Service	$1,436,655	$72,003	$17,773	$89,777		($28,490)		$1,497,942
27									
28	Accumulated Depr	$642,649				$48,686	($28,490)	($8,193)	$654,652
29									
30	Net Plant	$794,006							$843,290
31									
32	Property Tax Expense	$32,549							$31,580
33									
34	Effective Prop tax Rate	4.10%							3.74%
35									

Line		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
36		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
37	**Property Tax Recovery Calculation**											
38		**Cumulative Increm. ISR Prop. Tax for FY14**				**Cumulative Increm. ISR Prop. Tax for FY15**				**Cumulative Increm. ISR Prop. Tax for FY16**		
39			2 mos									
40	ISR Additions		$9,275				$76,340				$72,003	
41	Book Depreciation: base allowance on ISR eligible plant		($7,173)				($43,032)				($43,032)	
42	Book Depreciation: current year ISR additions		($324)				($1,031)				($740)	
43	COR		$828				$6,988				$8,193	
44												
45	Net Plant Additions		$2,605				$39,266				$36,425	
46												
47	RY Effective Tax Rate		3.98%				3.98%				3.98%	
48	ISR Property Tax Recovery on FY 2014 vintage investment			$104				$102				$89
49	ISR Property Tax Recovery on FY 2015 vintage investment							$1,564				$1,523
50	ISR Property Tax Recovery on FY 2016 vintage investment											$1,451
51												
52												
53	ISR Year Effective Tax Rate	3.66%				4.10%				3.74%		
54	RY Effective Tax Rate	3.98%	-0.32%			3.98%	0.12%			3.98%	-0.24%	
55	RY Effective Tax Rate 2 mos for FY 2014		-0.05%									
56	RY Net Plant times 2 mo rate	$746,900	-0.05%	($401)		$746,900	* 0.12%	$875		$746,900	* -0.24%	($1,773)
57	FY 2014 Net Adds times ISR Year Effective Tax rate	$2,605	-0.32%	($8)		$2,568	* 0.12%	$3		$2,234	* -0.24%	($5)
58	FY 2015 Net Adds times ISR Year Effective Tax rate					$39,266	* 0.12%	$46		$38,234	* -0.24%	($91)
59	FY 2016 Net Adds times ISR Year Effective Tax rate									$36,425	* -0.24%	($86)
60	Total Property Tax due to rate differential			($409)				$924				($1,869)
61												
62	Total ISR Property Tax Recovery			($306)				$2,590				$1,193
62a	As Approved in RIPUC Docket No. 4539			($304)				$2,590				$1,192
62b	Work Order Write Off Adjustment			(2)				(0)				2

The Narragansett Electric Company
d/b/a National Grid
FY 2017 ISR Property Tax Recovery Adjustment (continued)
(000s)

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Effective tax Rate Calculation	**End of FY 2016**	**ISR Additions**	**Non-ISR Add's**	**Total Add's**	**Bk Depr (1)**	**Retirements**	**COR**	**End of FY 2017**
63	Plant In Service	$1,497,942	$75,489	$10,718	$86,207		($22,245)		$1,561,904
64									
65	Accumulated Depr	$654,652				$50,815	($22,245)	($7,807)	$675,416
66									
67	Net Plant	$843,290							$886,489
68									
69	Property Tax Expense	$31,580							$30,784
70									
71	Effective Prop tax Rate	3.74%							3.47%
72									

73		(a)	(b)	(c)
74	**Property Tax Recovery Calculation**			
75		**Cumulative Increm. ISR Prop. Tax for FY17**		
76				
77	ISR Additions		$75,489	
78	Book Depreciation: base allowance on ISR eligible plant		($43,032)	
79	Book Depreciation: current year ISR additions		($905)	
80	COR		$7,807	
81				
82	Net Plant Additions		$39,359	
83				
84	RY Effective Tax Rate		3.98%	
85	ISR Property Tax Recovery on FY 2014 vintage investment			$76
86	ISR Property Tax Recovery on FY 2015 vintage investment			$1,440
87	ISR Property Tax Recovery on FY 2016 vintage investment			$1,392
88	ISR Property Tax Recovery on FY 2017 vintage investment			$1,567
89				
90	ISR Year Effective Tax Rate	3.47%		
91	RY Effective Tax Rate	3.98%	-0.51%	
92	RY Effective Tax Rate 2 mos for FY 2014			
93	RY Net Plant times 2 mo rate	$746,900	* -0.51%	($3,807)
94	FY 2014 Net Adds times ISR Year Effective Tax rate	$1,900	* -0.51%	($10)
95	FY 2015 Net Adds times ISR Year Effective Tax rate	$36,171	* -0.51%	($184)
96	FY 2016 Net Adds times ISR Year Effective Tax rate	$34,945	* -0.51%	($178)
97	FY 2017 Net Adds times ISR Year Effective Tax rate	$39,359	* -0.51%	($201)
98	Total Property Tax due to rate differential			($4,379)
99				
100	Total ISR Property Tax Recovery			$96

The Narragansett Electric Company
d/b/a National Grid
FY 2017 ISR Property Tax Recovery Adjustment (continued)
(000s)

Line Notes	
1(a)-9(a)	Per Rate Year cost of service
1(b) - 9(h)	Per FY 2014 Electric ISR Reconciliation Filing per Docket 4382
14(a)-22(h)	Per FY 2015 Electric ISR Reconciliation Filing per Docket 4473
26(a)-34(h)	Per FY 2016 Electric ISR Reconciliation Filing per Docket 4539
40(a) - 62(c)	Per FY 2014 Electric ISR Reconciliation Filing per Docket 4382
40(e)-62(g)	Per FY 2015 Electric ISR Reconciliation Filing per Docket 4473
40(i)-62(k)	Per FY 2016 Electric ISR Reconciliation Filing per Docket 4539
63(a)	Per Line 26(h)
63(b)	Per Page 3 of 20, Line 1
63(c)	Per Company's books
63(d)	Line 63(b) + Line 63(c)
63(f)	Per Page 2 of 20, Line 5
63(h)	Line 63(a) + Line 63(d) + Line 63(f)
65(a)	Per Line 28(h)
65(e)	Rate Year depr allowance of $44,986 * (Line 1(d)+1(f)* comp depr rate of 3.40%) + (Line 14(d)+14(f)* comp depr rate of 3.40%) + (Line , 26(d)+26(f)*comp depr rate of 3.40%) + (Line 63(d) +63(f)*comp depr rate of 3.40%*50%)
65(f)	Per Line 63(f)
65(g)	Per Page 2 of 20, Line 10
65(h)	Line 65(a) + Line 65(e) + Line 65(f) + Line 65(g)
67(a)	Per Line 30(h)
67(h)	Line 63(h) - Line 65(h)
69(a)	Per Line 32(h)
69(h)	Per Company's books

Line Notes	
71(a)	Per Line 34(h)
71(h)	Line 69(h) / Line 67(h)
77(b)	Per Line 63(b)
78(b)	Per Page 2 of 20, Line 8
79(b)	Per Page 2 of 20, Line 15
80(b)	Per Line 65(g)
82(b)	Line 77(b) + Line 78(b) + Line 79(b) + Line 80(b)
84(b)	Per Line 9(a)
85(c)	Line 84(b) * Line 94(a)
86(c)	Line 84(b) * Line 95(a)
87(c)	Line 84(b) * Line 96(a)
88(c)	Line 84(b) * Line 97(a)
90(a)	Per Line 71(h)
91(a)	Per Line 9(a)
91(b)	Line 90(a) - Line 91(a)
93(a)	Per Line 5(a)
93(b)	Per Line 91(b)
93(c)	Line 93(a) * Line 91(b)
94(a)	Line 57(i) - ((Line 40(b)+Line 1(f))*3.40%)
94(b)	Per Line 91(b)
94(c)	Line 94(a) * Line 91(b)
95(a)	Line 58(i) - ((Line 40(f)+Line 14(f))*3.40%)
95(b)	Per Line 91(b)
95(c)	Line 95(a) * Line 91(b)
96(a)	Line 59(i) - ((Line 40(j)+Line 26(f))*3.40%)

Line Notes	
96(b)	Per Line 91(b)
96(c)	Line 96(a) * Line 91(b)
97(a)	Per Line 82(b)
97(b)	Per Line 91(b)
97(c)	Line 97(a) * Line 91(b)
98(c)	Sum of Lines 93(c) through Lines 97(c)
100(c)	Sum of Lines 85(c) through Lines 88(c) + Line 98(c)

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
Deferred Income Tax ("DIT") Provisions and Net Operating Losses ("NOL")

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
								CY 2011	CY 2012	Jan-2013	Feb 13 - Jan 14		
1	Total Base Rate Plant DIT Provision							$15,856,458	$5,546,827	$521,151	($1,967,911)		
		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
2	Total Base Rate Plant DIT Provision							$13,279,050	$4,353,286	($1,639,926)	$0	$0	$0
3	Incremental FY 12	($228,498)	($226,281)	($224,120)	($222,009)	($219,947)	($217,927)	($228,498)	$2,217	$2,161	$2,110	$2,063	$2,019
4	Incremental FY 13		($2,013,121)	($1,937,607)	($2,045,965)	($1,957,316)	($1,863,117)		($2,013,121)	$75,514	($108,358)	$88,649	$94,199
5	Incremental FY 14			$2,763,058	$2,543,022	$2,439,963	$2,329,465			$2,763,058	($220,036)	($103,059)	($110,498)
6	FY 2015				$24,793,846	$24,814,134	$24,778,689				$24,793,846	$20,288	($35,445)
7	FY 2016					$20,940,288	$21,076,521					$20,940,288	$136,232
8	FY 2017						$20,132,244						$20,132,244
9	TOTAL Plant DIT Provision	($228,498)	($2,239,403)	$601,331	$25,068,893	$46,017,122	$66,235,874	$13,050,552	$2,342,381	$1,200,808	$24,467,561	$20,948,229	$20,218,752
10	Distribution-related NOL							$3,434,992	$8,552,548	$13,179,356	$8,148,936	$10,693,796	$0
11	Lesser of Distribution-related NOL or DIT Provision							$3,434,992	$2,342,381	$1,200,808	$8,148,936	$10,693,796	$0
12	Total NOL							$4,310,461	$11,442,811	$19,452,677	$12,108,052	$16,267,471	$0
13	NOL recovered in transmission rates							$875,468	$2,890,262	$6,273,321	$3,959,116	$5,573,675	$0
14	Distribution-related NOL							$3,434,992	$8,552,548	$13,179,356	$8,148,936	$10,693,796	$0

1(g) Per Dkt 4323 Compliance filing Attachment 1, Page 64 of 71, Line 19(e) less Line 19(a)
1(h)-1(j) Per Dkt 4323 Compliance filing Attachment 1, Page 70 of 71, Lines 32, 42, and 48
3(a)-9(f) ADIT per vintage year ISR revenue requirement calculations
3(g) -8(l) Year over year change in ADIT shown in Cols (a) through (e)
9 Sum of Lines 2 through 8
10 Line 14
11 Lesser of Line 9 or 10
12 Per Tax Department
13 Quarterly average transmission plant allocator per Integrated Facilities Agreement (IFA) * Line 12
14 Line 12 - Line 13

The Narragansett Electric Company
d/b/a National Grid
FY 2017 Electric ISR Revenue Requirement Reconciliation
True-Up for FY 2012 through FY 2014 Net Operating Losses ("NOL")

		(a)	(b)	(c)	(d)	(e)	(f)
		Revenue Requirement Year					
		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
1	Return on Rate Base	9.30%	9.84%	9.68%	9.68%	9.68%	9.68%
		Vintage Capital Investment Year					
		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
2	Lesser of NOL or DIT Provision	$ 4,310,461	$ 2,342,381	$ 1,200,808	$ 12,108,052	$ 10,200,749	$ -
	<u>Revenue Requirement Increase due to NOL</u>						
		Revenue Requirement Year					
	Vintage Capital Investment Year	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
3	FY 2012	$ 200,436	$ 424,149	$ 417,253	$ 417,253	$ 417,253	$ 417,253
4	FY 2013	$ -	$ 115,245	$ 226,743	$ 226,743	$ 226,743	$ 226,743
5	FY 2014	$ -	$ -	$ 27,000	$ 116,238	$ 116,238	$ 116,238
6	FY 2015	$ -	$ -	$ -	$ 586,030	$ 1,172,059	$ 1,172,059
7	FY 2016	$ -	$ -	$ -	$ -	$ 493,716	$ 987,432
8	FY 2017	$ -	$ -	$ -	$ -	$ -	$ -
9	TOTAL	**$ 200,436**	**$ 539,395**	**$ 670,996**	**$ 1,346,263**	**$ 2,426,009**	**$ 2,919,725**
10	**Total FY 2012 through FY 2014 revenue requirement impact to be recovered over three years**						**$ 1,410,826**
11	**Recovery per year**						**$ 470,275**

1(a) Per Docket No. 4065
1(b)-(c) Per vintage year revenue requirement calculations at Page 10 of 20, and Page 8 of 20, respectively
2 FY2015 Revenue Requirement Reconciliation R.I.P.U.C. Docket No. 4473
3 Line 2(a) * Line 1(a) * 50%; Line 2(a) * Line 1(b); Line 2(a) * Line 1(c); Line 2(a) * Line 1(d); Line 2(a) * Line 1(e); Line 2(a) * Line 1(f)
4 Line 2(b) * Line 1(b) * 50%; Line 2(b) * Line 1(c); Line 2(b) * Line 1(d); Line 2(b) * Line 1(e); Line 2(b) * Line 1(f)
5 Line 2(c) * Line 1(c) * 23.23%; Line 2(c) * Line 1(d); Line 2(c) * Line 1(e); Line 2(c) * Line 1(f)
6 Line 2(d) * Line 1(d) * 50%; Line 2(d) * Line 1(e); Line 2(d) * Line 1(f)
7 Line 2(e) * Line 1(e) * 50%; Line 2(e) * Line 1(f)
8 Line 2(f) * Line 1(f) * 50%
9 Sum of Lines 3 through 8
10 Line 9(a) + Line 9(b) + Line 9(c)
11 Line 10(f) / 3

Testimony of
Adam S. Crary

PRE-FILED DIRECT TESTIMONY

OF

ADAM S. CRARY

August 1, 2017

Table of Contents

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your full name and business address.

A. My name is Adam S. Crary, and my business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. By whom are you employed and in what capacity?

A. I am a Senior Analyst for Electric Pricing, New England in the Regulation and Pricing Department of National Grid USA Service Company, Inc. This department provides rate-related support to The Narragansett Electric Company d/b/a National Grid (the Company or National Grid).

Q. Please describe your educational background and training.

A. In 1995, I graduated from Berklee College of Music in Boston, MA with a Bachelor of Music degree.

Q. Please describe your professional experience.

A For approximately eight years between 2000 and 2014, I was employed by Computer Sciences Corporation as a Pricing Analyst for their Managed Hosting and Cloud Computing business divisions. I began my employment as a Senior Pricing Analyst with National Grid in June 2014.

Q. Have you testified previously before Rhode Island Public Utilities Commission (PUC)?

A. Yes.

I. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony presents the proposed CapEx and O&M Reconciling Factors, as those terms are defined in the Company's Infrastructure, Safety, and Reliability Provision, RIPUC No. 2118, effective February 1, 2013 (ISR Provision), resulting from the reconciliation of actual costs and revenue associated with the Fiscal Year (FY) 2017 ISR Plan (ISR Plan or Plan). In support of the proposed factors, my testimony presents the following:

- the results of the annual reconciliation of the actual FY 2017 capital investment (CapEx) revenue requirement and the Operations and Maintenance (O&M) expense to the actual revenue billed;
- the status of the FY 2015 CapEx and O&M reconciliations;
- the status of the FY 2016 CapEx and O&M reconciliations;
- the calculation of the proposed CapEx and O&M Reconciling Factors to be effective October 1, 2017; and
- the typical bill impacts related to the proposed reconciling factors.

Q. How is your testimony organized?

A. My testimony is organized as follows:

- Section III presents the Summary of FY 2017 CapEx and O&M Reconciliations;
- Section IV presents the results of the FY 2017 CapEx Revenue and the Actual CapEx Revenue Requirement Reconciliation, the calculation of the proposed CapEx Reconciling Factors, and the status of the recovery and refund of the FY 2015 and FY 2016 CapEx reconciliation balances, respectively;
- Section V presents the results of the FY 2017 O&M Revenue and Expense Reconciliation, the calculation of the proposed O&M Reconciling Factor, and the status of the refunds of the FY 2015 O&M and FY 2016 O&M over-recovered balances; and
- Section VI presents the rate class bill impact analysis.

III. SUMMARY OF FY 2017 CAPEX AND O&M RECONCILIATIONS

Q. Please summarize the results of the FY 2017 CapEx and O&M reconciliations.

A. A summary of the results of the FY 2017 CapEx and O&M reconciliations is presented in Attachment ASC-1. Pursuant to the ISR Provision, the annual reconciliations compare the actual revenue billed during the Plan year through the approved CapEx and O&M Factors to the actual CapEx and O&M revenue requirement. The calculation of the actual revenue requirement is presented in the testimony of Company Witness Aidimarys Martinez. As reflected in Attachment ASC-1, the result of the CapEx reconciliation is an over-recovery of approximately $7.2 million; the result of the O&M reconciliation is an over-recovery of approximately $111,000.

Q. Please briefly summarize the operation of the tariff provision that enables the Company to recover certain costs through the ISR Plan.

A. In accordance with the ISR Provision, the Company is allowed to recover the revenue requirement related to capital investments through CapEx Factors and to recover certain expenditures for Inspection and Maintenance (I&M) and Vegetation Management (VM) activities through O&M Factors.

In the ISR Plan filing for the upcoming year, the Company determines the CapEx Factors, which are designed to recover the revenue requirement on the forecasted capital investment for the ISR Plan's investment year plus the cumulative revenue requirement associated with capital investment in prior years' ISR Plans, and determines the O&M Factors based on the forecasted O&M expense for the Plan year. On an annual basis, the Company is required to reconcile the actual annual CapEx revenue requirement on cumulative ISR capital investment and the actual O&M expense incurred to actual billed revenue generated from the CapEx Factors and the O&M Factors. The over or under-recovered balances resulting from the CapEx and O&M reconciliations are either credited to or recovered from customers through the CapEx Reconciling Factors and the O&M Reconciling Factor, respectively.

IV. CAPEX RECONCILIATION AND PROPOSED CAPEX RECONCILING FACTORS

Q. What is the result of the CapEx reconciliation for FY 2017?

A. The FY 2017 CapEx reconciliation by rate class is presented in Attachment ASC-2, page 1, Lines (4) through (6). Line (5) represents the CapEx revenue billed during the period April 1, 2016 through March 31, 2017 of approximately $17.5 million. Line (4) reflects the actual CapEx revenue requirement amount of approximately $10.3 million. Line (6) identifies the over-recovery by rate class of the CapEx revenue requirement, which totals approximately $7.2 million.

Q. Why has the Company prepared the CapEx reconciliation by rate class?

A. The ISR Provision requires that the CapEx Reconciling Factors be calculated as class-specific per-kWh factors designed to recover or credit the under- or over-recovery of the actual Cumulative Revenue Requirement, as allocated to each rate class by the Rate Base Allocator, for the prior fiscal year. The Rate Base Allocator is the percentage of total rate base allocated to each rate class determined in the most recently-approved allocated cost of service study. Page 1, Line (4) of Attachment ASC-2 shows the allocation of the actual CapEx revenue requirement to each rate class based upon the Rate Base Allocator approved in the Company's 2012 general rate case in Docket No. 4323.

Q. Please describe the results of the rate class reconciliation.

A. As shown in Attachment ASC-2, page 1, the allocated actual FY 2017 revenue requirement on cumulative capital investment (Line (4)) is subtracted from the CapEx Factor revenue billed for each rate class (Line (5)), resulting in the over-recovery (Line (6)) of approximately $7.2 million. The detail of the CapEx revenue billed for each rate class is provided in Attachment ASC-2, page 2.

Q. Please describe the amount included on Line (7) of Attachment ASC-2.

A. The amounts presented on Line (7) reflect the final balance of the under-recovery resulting from the FY 2015 CapEx reconciliation. The recovery of the FY 2015 CapEx reconciliation balance is presented on page 3. Of the $3,605,450 under-recovery for FY 2015 to be recovered from customers via CapEx Reconciling Factors approved by the PUC, the Company recovered $3,702,026 from November 1, 2015 through September 30, 2016. The Company over-recovered a net amount of $96,576, as shown on Line (7), Column (a). As described in Docket No. 4473, the Company is including each rate class' residual balance associated with the net over-recovery of the FY 2015 deferral as an adjustment to the FY 2017 CapEx reconciliation balance, to ensure the Company does not over-recover or under-recover any amounts associated with the FY 2015 Plan.

Q. How is the Company proposing to credit the FY 2017 CapEx over-recovery?

A. The Company is proposing to implement a CapEx Reconciling Factor for each rate class that is consistent with the results of the rate class reconciliation. The calculation of the proposed CapEx Reconciling Factors is presented in Attachment ASC-2, page 1. The over-recovery by rate class on Line (8) are divided by each rate class' forecasted kWh deliveries for the period October 1, 2017 through September 30, 2018 on Line (9). The class-specific CapEx Reconciling Factors are shown on Line (10).

Q. Is the Company providing the status of the net over-recovery from the FY 2016 CapEx reconciliation?

A. Yes. The status of the FY 2016 CapEx reconciliation net over-recovery balance is presented in Attachment ASC-2, page 4. As of June 30, 2017, the balance reflects a remaining net over-recovery of $115,988, which the Company will continue to credit or surcharge customers, as applicable through September 30, 2017.

Q. How will the Company propose to credit or recover any residual balances as of September 30, 2017?

A. Pursuant to the ISR Provision, the amount approved for recovery or refund through the CapEx Reconciling Factors is subject to reconciliation. Therefore, the Company will present the final reconciliation of balances from the FY 2016 CapEx reconciliation in the FY 2018 ISR Plan Reconciliation Filing and include each rate class' residual balance from the FY 2016 CapEx reconciliation with the balances resulting from the FY 2018 CapEx reconciliation, and will propose CapEx Reconciling Factors on the total.

V. <u>O&M RECONCILIATION AND PROPOSED O&M RECONCILING FACTOR</u>

Q. What is the result of the O&M reconciliation for FY 2017?

A. The O&M reconciliation for FY 2017 is presented in Attachment ASC-3, page 1. Line (1) shows the actual O&M expense for FY 2017 of approximately $9.5 million, which is supported in the testimony of Company Witnesses Mr. Prabhjot S. Anand and Ms. Martinez. Line (2) shows O&M revenue billed through the O&M Factors from April 1, 2016 through March 31, 2017 of approximately $9.6 million. Line (3) shows the difference of approximately $111,000, representing an over-recovery of actual O&M expense.

Q. Please describe the amount included on Line (4).

A. The amount presented on Line (4) reflects the remaining balance of the over-recovery resulting from FY 2015 O&M reconciliation. The crediting to customers of the over-recovery is presented on page 3. Of the $434,885 over-recovery that formed the basis for the O&M Reconciling Factors approved by the PUC, the Company credited customers $434,759 from October 1, 2015 through September 30, 2016, leaving $126 to be credited to customers. As described in Docket No. 4473, the Company is including the residual balance with the FY 2017 O&M reconciliation balance.

Q. Is the Company providing the O&M Factor revenue?

A. Yes. Attachment ASC-3, page 2 presents the O&M Factor revenue billed by month.

Q. What is the proposed O&M Reconciling Factor?

A. The proposed O&M Reconciling Factor is calculated on Attachment ASC-3, page 1. The over-recovery of $110,823 on Line (5) is divided by the forecasted kWhs during the recovery period, October 1, 2017 through September 30, 2018, on Line (6), resulting in a credit of 0.001¢ per kWh on Line (7).

Q. Why is the Company proposing a uniform per kWh O&M Reconciling Factor?

A. Pursuant to the ISR Provision, the O&M Reconciling Factor is a uniform per-kWh factor, which is designed to recover or refund the under- or over-recovery of actual I&M and VM expense for the prior fiscal year, based on forecasted kWhs during the recovery or refund period beginning October 1.

Q. Is the Company providing the status of the over-recovery of the FY 2016 O&M reconciliation?

A. Yes. The status of the balance from the FY 2016 O&M reconciliation is presented in Attachment ASC-3, page 4. As of June 30, 2017, there is a remaining over-recovery balance of $678,754, which the Company will continue to credit customers through September 30, 2017.

Q. How does the Company propose to credit or recover the residual balance at September 30, 2017?

A. Pursuant to the ISR Provision, the amount approved for recovery or refund through the O&M Reconciling Factor is subject to reconciliation. Therefore, the Company will present the final reconciliation of the balance from the FY 2016 O&M reconciliation in the FY 2018 ISR Reconciliation Filing and include the residual balance of the FY 2016 O&M reconciliation with the results of the FY 2018 O&M reconciliation, and will propose an O&M Reconciling Factor on the total.

VI. <u>TYPICAL BILL ANALYSIS</u>

Q. Is the Company providing a typical bill analysis to illustrate the impact of the proposed rates on each of the Company's rate classes?

A. Yes. The typical bill analysis illustrating the monthly bill impact of the proposed rate changes for each rate class is provided in Attachment ASC-4. The impact of the proposed CapEx Reconciling Factor and the proposed O&M Reconciling Factor on a typical residential customer receiving Standard Offer Service and using 500 kWhs per month is a decrease of $0.58, or approximately 0.7%, from $89.06 to $88.48.

Q. Is the Company providing a proposed Summary of Retail Delivery Rates, Tariff No. 2095, reflecting the reconciling factors proposed in this filing?

A. No, not at this time. Concurrent with this filing, the Company is submitting to the PUC its Pension and Post-retirement benefits other than Pension (PBOP) Adjustment Factor (PAF) filing in which the Company will propose a PAF, effective October 1, 2017. The

Company has also submitted a Renewable Energy (RE) Growth Factor Filing with proposed factors also effective October 1, 2017. The Company will file a Summary of Retail Delivery Rates reflecting all rates proposed for October 1, 2017 in compliance with the PUC's orders in this proceeding, and the PAF and the RE Growth proceedings.

VII. <u>CONCLUSION</u>

Q. Does this conclude your testimony?

A. Yes.

Attachments of
Adam S. Crary

List of Attachments

Attachment ASC-1

Attachment ASC-1

FY2017 ISR Plan Annual Reconciliation Summary

FY 2017 ISR Plan Annual Reconciliation Summary

		CapEx (a)	O&M (b)	Total (c)
(1)	Actual Revenue Requirement	$10,303,388	$9,466,647	$19,770,035
(2)	Revenue Billed	$17,507,073	$9,577,345	$27,084,418
(3)	Total Over Recovery	$7,203,685	$110,698	$7,314,383

(1) Column (a) per Attachment AM-1, Page 1, Line (15)
Column (b) per Attachment AM-1, Page 1, Line (4)
Column (c) sum of columns (a) and (b)

(2) Column (a) per Attachment ASC-2, page 1, Line (5); Column (b) per Attachment ASC-3, page 1, line (2)

(3) Line (2) - Line (1)

Attachment ASC-2

Attachment ASC-2

CapEx Reconciliations and Proposed CapEx Reconciling Factors

Proposed CapEx Reconciling Factors
For Fiscal Year 2017 ISR Plan
For the Recovery (Refund) Period October 1, 2017 through September 30, 2018

		Total (a)	Residential A-16 / A-60 (b)	Small C&I C-06 (c)	General C&I G-02 (d)	200 kW Demand B-32 / G-32 (e)	3000 kW Demand B-62 / G-62 (f)	Lighting S-05 / S-06 S-10 / S-14 (g)	Propulsion X-01 (h)
(1)	Actual FY2017 Capital Investment Revenue Requirement	$10,303,388							
(2)	Total Rate Base ($000s)	$561,738	$296,490	$54,542	$82,460	$77,651	$19,545	$29,286	$1,764
(3)	Rate Base as Percentage of Total	100.00%	52.78%	9.71%	14.68%	13.82%	3.48%	5.21%	0.31%
(4)	Allocated Actual FY2017 Capital Investment Revenue Requirement	$10,303,388	$5,438,209	$1,000,410	$1,512,480	$1,424,276	$358,495	$537,170	$32,348
(5)	CapEx Revenue Billed	$17,507,073	$9,435,653	$1,709,223	$2,630,079	$2,473,402	$555,383	$647,114	$56,218
(6)	Total Over Recovery for FY 2017	$7,203,685	$3,997,444	$708,813	$1,117,599	$1,049,126	$196,888	$109,945	$23,871
(7)	Remaining Over (Under) For FY 2015	$96,576	$71,407	$3,936	$141,442	($67,802)	($34,333)	($18,859)	$785
(8)	Total Over (Under) Recovery	$7,300,261	$4,068,851	$712,749	$1,259,041	$981,324	$162,555	$91,086	$24,656
(9)	Forecasted kWhs - October 1, 2017 through September 30, 2018	7,337,969,020	2,998,659,138	595,774,268	1,278,569,621	1,957,175,257	423,715,760	60,279,246	23,795,730
(10)	Proposed Class-specific CapEx Reconciling Factor (Credit) per kWh		($0.00135)	($0.00119)	($0.00098)	($0.00050)	($0.00038)	($0.00151)	($0.00103)

(1) Column (a) per Attachment AM-1, Page 1, Line (15)
(2) per R.I.P.U.C. 4323, Compliance Attachment 3A, (Schedule HSG-1), page 2, Line (10)
(3) Line (2) ÷ Line (2) Total Column
(4) Line (1) Total Column x Line (3)
(5) per page 2
(6) Line (5) - Line (4)
(7) per Page 3, Line (6)
(8) Line (6) + Line (7)
(9) per Company forecasts
(10) -1 x [Line (8) ÷ Line (9)], truncated to 5 decimal places

Fiscal Year 2017 CapEx Reconciliation
For the Period April 1, 2016 through March 31, 2017
For the Recovery/Refund Period October 1, 2017 through September 30, 2018

CapEx Revenue By Rate Class:

		Residential A-16 / A-60			Small C&I C-06			General C&I G-02			200 kW Demand B-32 / G-32		
	Month	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)
(1)	Apr-16	$371,782	$66,954	$304,828	$72,623	$13,182	$59,441	$116,585	$23,713	$92,872	$58,646	$15,374	$43,272
	May-16	$696,003	$124,907	$571,096	$141,862	$25,493	$116,369	$255,453	$48,841	$206,612	$224,826	$31,344	$193,481
	Jun-16	$897,435	$160,846	$736,589	$168,016	$30,167	$137,848	$279,335	$57,327	$222,008	$247,477	$36,286	$211,191
	Jul-16	$1,113,443	$199,476	$913,968	$189,877	$34,082	$155,795	$298,619	$63,856	$234,763	$251,176	$36,751	$214,425
	Aug-16	$1,367,541	$244,996	$1,122,545	$208,348	$37,320	$171,028	$312,862	$68,015	$244,847	$272,730	$39,020	$233,709
	Sep-16	$1,207,776	$216,476	$991,300	$199,756	$35,856	$163,900	$313,587	$66,874	$246,713	$269,238	$39,638	$229,600
	Oct-16	$779,037	$85,802	$693,235	$150,376	$16,199	$134,177	$252,701	$29,067	$223,635	$224,617	$12,794	$211,823
	Nov-16	$631,598	($2,063)	$633,661	$119,473	($1,257)	$120,730	$205,282	($5,794)	$211,076	$183,556	($15,465)	$199,021
	Dec-16	$729,366	($2,385)	$731,751	$128,926	($1,358)	$130,284	$192,567	($5,967)	$198,534	$171,401	($15,757)	$187,158
	Jan-17	$834,890	($2,730)	$837,620	$148,388	($1,562)	$149,950	$206,370	($6,462)	$212,832	$174,854	($16,368)	$191,222
	Feb-17	$770,918	($2,519)	$773,437	$144,641	($1,522)	$146,163	$199,560	($6,115)	$205,676	$165,849	($15,290)	$181,140
	Mar-17	$716,431	($2,341)	$718,772	$140,577	($1,481)	$142,057	$205,495	($6,221)	$211,716	$172,082	($15,728)	$187,810
(2)	Apr-17	$405,525	($1,325)	$406,850	$80,630	($849)	$81,479	$115,283	($3,511)	$118,794	$180,340	($9,210)	$189,550
	Total	$10,521,746	$1,086,093	$9,435,653	$1,893,494	$184,270	$1,709,223	$2,953,700	$323,621	$2,630,079	$2,596,792	$123,389	$2,473,402

		3000 kW Demand B-62 / G-62			Lighting S-05 / S-06 / S-10 / S-14			Propulsion X-01		
	Month	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)
(1)	Apr-16	$21,121	$3,926	$17,195	$52,387	$ 7,507.41	$44,880	$1,653	$504	$1,148
	May-16	$51,633	$7,313	$44,321	$50,755	$9,452	$41,303	$5,474	$1,020	$4,455
	Jun-16	$55,201	$8,142	$47,059	$49,241	$9,028	$40,213	$6,036	$1,109	$4,927
	Jul-16	$57,991	$8,478	$49,513	$52,063	$9,592	$42,470	$5,991	$1,100	$4,891
	Aug-16	$60,791	$9,131	$51,660	$51,848	$9,489	$42,359	$5,984	$1,099	$4,885
	Sep-16	$62,345	$9,253	$53,093	$61,517	$11,313	$50,204	$5,677	$1,043	$4,635
	Oct-16	$58,088	$7,008	$51,079	$60,563	$6,948	$53,616	$5,761	$608	$5,153
	Nov-16	$49,896	$4,337	$45,559	$58,947	($1,665)	$60,611	$4,607	$0	$4,607
	Dec-16	$48,553	$4,654	$43,899	$63,945	($1,806)	$65,751	$5,086	$0	$5,086
	Jan-17	$50,025	$4,665	$45,360	$70,450	($1,989)	$72,439	$4,390	$0	$4,390
	Feb-17	$48,968	$4,597	$44,370	$57,920	($1,636)	$59,556	$4,663	$0	$4,663
	Mar-17	$43,771	$4,509	$39,261	$51,706	($1,460)	$53,166	$4,331	$0	$4,331
(2)	Apr-17	$25,624	$2,611	$23,014	$ 19,982	$ (564)	$20,546	$3,048	$0	$3,048
	Total	$634,008	$78,624	$555,383	$701,323	$54,209	$647,114	$62,701	$6,483	$56,218

(1) Reflects revenue associated with consumption on and after April 1
(2) Reflects revenue associated with consumption prior to April 1

(a) from monthly revenue reports
(b) per page 3 and page 4
(c) Column (a) - Column (b)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment ASC-2
Page 2 of 4

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment ASC-2
Page 3 of 4

Fiscal Year 2015 CapEx Reconciliation of Under Recovery
For the Period April 1, 2014 through March 31, 2015
For the Recovery Period November 1, 2015 through September 30, 2016

		Total	Residential A-16 / A-60		Small C&I C-06		General C&I G-02		200 kW Demand B-32 / G-32	
		(a)	(b)	(c)	(b)	(c)	(b)	(c)	(b)	(c)
(1)	Beginning (Under) Recovery	($3,605,450)		($1,926,844)		($353,418)		($516,285)		($474,456)
(2)	CapEx Reconciling Factors			$0.00067		$0.00063		$0.00052		$0.00021
			kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue
(3)	Nov-15	$268,010	198,436,428	$132,952	40,522,337	$25,529	94,315,077	$49,044	155,396,762	$32,633
	Dec-15	$324,416	255,426,956	$171,136	48,212,025	$30,374	107,769,579	$56,040	167,357,712	$35,145
	Jan-16	$332,762	269,040,539	$180,257	48,875,074	$30,791	107,598,964	$55,951	161,057,221	$33,822
	Feb-16	$314,756	252,555,825	$169,212	48,875,183	$30,791	101,290,898	$52,671	162,108,994	$34,043
	Mar-16	$311,468	244,902,745	$164,085	49,509,526	$31,191	106,196,954	$55,222	164,119,909	$34,465
	Apr-16	$288,263	219,628,885	$147,151	45,986,650	$28,972	100,224,108	$52,117	160,895,802	$33,788
	May-16	$248,370	186,428,234	$124,907	40,465,218	$25,493	93,924,677	$48,841	149,258,346	$31,344
	Jun-16	$302,904	240,069,008	$160,846	47,884,377	$30,167	110,243,864	$57,327	172,790,748	$36,286
	Jul-16	$353,336	297,724,745	$199,476	54,098,724	$34,082	122,799,952	$63,856	175,006,090	$36,751
	Aug-16	$409,070	365,665,049	$244,996	59,238,222	$37,320	130,797,496	$68,015	185,811,000	$39,020
	Sep-16	$380,452	323,097,962	$216,476	56,913,733	$35,856	128,603,649	$66,874	188,754,397	$39,638
(4)	Oct-16	$168,220	129,487,777	$86,757	26,647,519	$16,788	61,094,804	$31,769	93,889,944	$19,717
(5)	Total	$3,702,026		$1,998,251		$357,354		$657,727		$406,654
(6)	Ending Over(Under) Recovery	$96,576		$71,407		$3,936		$141,442		($67,802)

		3000 kW Demand B-62 / G-62		Lighting S-05/ S-06/ S-10 / S-14		Propulsion X-01	
		(b)	(c)	(b)	(c)	(b)	(c)
(1)	Beginning (Under) Recovery		($130,424)		($192,405)		($11,618)
(2)	CapEx Reconciling Factors		$0.00023		$0.00320		$0.00054
		kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue
(3)	Nov-15	33,336,135	$7,667	5,976,945	$19,126	1,958,351	$1,058
	Dec-15	36,278,905	$8,344	6,937,889	$22,201	2,176,665	$1,175
	Jan-16	31,781,472	$7,310	7,379,873	$23,616	1,878,619	$1,014
	Feb-16	38,005,812	$8,741	5,711,285	$18,276	1,890,314	$1,021
	Mar-16	35,380,553	$8,138	5,412,154	$17,319	1,940,779	$1,048
	Apr-16	37,512,938	$8,628	5,156,191	$16,500	2,051,947	$1,108
	May-16	31,794,000	$7,313	2,953,889	$9,452	1,887,984	$1,020
	Jun-16	35,398,730	$8,142	2,821,171	$9,028	2,052,916	$1,109
	Jul-16	36,861,340	$8,478	2,997,636	$9,592	2,037,817	$1,100
	Aug-16	39,699,800	$9,131	2,965,303	$9,489	2,035,447	$1,099
	Sep-16	40,229,952	$9,253	3,535,294	$11,313	1,931,119	$1,043
(4)	Oct-16	21,508,110	$4,947	2,385,468	$7,633	1,126,715	$608
(5)	Total	417,787,747	$96,091	54,233,098	$173,546	22,968,673	$12,403
(6)	Ending Over(Under) Recovery		($34,333)		($18,859)		$785

(1) per RIPUC Docket No. 4473, Attachment ASC-6, page 1, line (8)
(2) per RIPUC Docket No. 4473, Attachment ASC-6, page 1, line (10)
(3) prorated for usage on and after Nov. 1, 2015
(4) prorated for usage prior to October 1st, 2016
(5) sum of kWhs & revenue
(6) Line (1) + Line (5)

(a) sum of Column (b) from each rate
(b) from Company revenue report
(c) Column (b) x CapEx Reconciling Factor

Fiscal Year 2016 CapEx Reconciliation of Over Recovery
For the Period April 1, 2015 through March 31, 2016
For the Recovery Period October 1, 2016 through September 30, 2017

		Total	Residential A-16 / A-60		Small C&I C-06		General C&I G-02		200 kW Demand B-32 / G-32	
		(a)	(b)	(c)	(b)	(c)	(b)	(c)	(b)	(c)
(1)	Beginning Over(Under) Recovery	$306,323		$36,730		$21,445		$82,339		$210,381
(2)	CapEx Reconciling Factors			($0.00001)		($0.00003)		($0.00006)		($0.00010)
			kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue
(3)	Oct-16	($9,794)	95,473,615	($955)	19,647,685	($589)	45,046,273	($2,703)	69,226,706	($6,923)
	Nov-16	($21,907)	206,273,900	($2,063)	41,891,243	($1,257)	96,570,758	($5,794)	154,652,793	($15,465)
	Dec-16	($22,619)	238,467,830	($2,385)	45,270,239	($1,358)	99,457,256	($5,967)	157,570,354	($15,757)
	Jan-17	($24,447)	273,001,763	($2,730)	52,071,331	($1,562)	107,697,512	($6,462)	163,683,007	($16,368)
	Feb-17	($22,485)	251,907,544	($2,519)	50,739,090	($1,522)	101,923,880	($6,115)	152,903,424	($15,290)
	Mar-17	($22,722)	234,127,726	($2,341)	49,350,049	($1,481)	103,684,327	($6,221)	157,278,833	($15,728)
	Apr-17	($22,294)	229,957,624	($2,300)	49,091,325	($1,473)	101,534,869	($6,092)	159,809,235	($15,981)
	May-17	($19,173)	197,051,306	($1,971)	45,798,429	($1,374)	95,569,388	($5,734)	152,590,449	($15,259)
	Jun-17	($24,894)	224,582,709	($2,246)	51,611,634	($1,548)	105,225,996	($6,314)	162,235,622	($16,224)
	Jul-17	$0	-	$0	-	$0	-	$0	-	$0
	Aug-17	$0	-	$0	-	$0	-	$0	-	$0
	Sep-17	$0	-	$0	-	$0	-	$0	-	$0
(4)	Oct-17	$0	-	$0	-	$0	-	$0	-	$0
(5)	Total	($190,335)		($19,508)		($12,164)		($51,403)		($132,995)
(6)	Ending Over(Under) Recovery	$115,988		$17,222		$9,281		$30,936		$77,386

		3000 kW Demand B-62 / G-62		Lighting S-05/ S-06/ S-10 / S-14		Propulsion X-01	
		(b)	(c)	(b)	(c)	(b)	(c)
(1)	Beginning Over(Under) Recovery		($70,276)		$25,572		$132
(2)	CapEx Reconciling Factors		$0.00013		($0.00039)		$0.00000
		kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue	kWhs	CapEx Reconciling Factor Revenue
(3)	Oct-16	15,858,307	$2,062	1,758,847	($686)	832,892	$0
	Nov-16	33,362,351	$4,337	4,268,515	($1,665)	1,890,091	$0
	Dec-16	35,801,268	$4,654	4,630,537	($1,806)	2,119,277	$0
	Jan-17	35,885,141	$4,665	5,101,139	($1,989)	1,829,122	$0
	Feb-17	35,365,105	$4,597	4,193,967	($1,636)	1,943,050	$0
	Mar-17	34,687,874	$4,509	3,744,260	($1,460)	1,804,590	$0
	Apr-17	34,848,293	$4,530	2,510,705	($979)	2,203,445	$0
	May-17	29,619,450	$3,851	(3,369,134)	$1,314	2,096,059	$0
	Jun-17	37,972,397	$4,936	8,972,493	($3,499)	1,982,779	$0
	Jul-17	-	$0	-	$0	-	$0
	Aug-17	-	$0	-	$0	-	$0
	Sep-17	-	$0	-	$0	-	$0
(4)	Oct-17	-	$0	-	$0	-	$0
(5)	Total	293,400,186	$38,142	31,811,329	($12,406)	16,701,305	$0
(6)	Ending Over(Under) Recovery		($32,134)		$13,166		$132

(1) per R.I.P.U.C. Docket No. 4539, Attachment ASC-2, page 1, line (8)
(2) per R.I.P.U.C. Docket No. 4539, Attachment ASC-2, page 1, line (10)
(3) prorated for usage on and after October 1, 2016
(4) prorated for usage prior to October 1, 2017
(5) sum of kWhs & revenue
(6) Line (1) + Line (5)

(a) sum of Column (b) from each rate
(b) from Company revenue reports
(c) Column (b) x CapEx Reconciling Factor

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment ASC-2
Page 4 of 4

Attachment ASC-3

Attachment ASC-3

O&M Reconciliations and Proposed O&M Reconciling Factor

Fiscal Year 2017 Operation & Maintenance Reconciliation and Proposed Factor
Reconciliation of O&M Revenue and Actual O&M Revenue Requirement
For Fiscal Year 2017 ISR Plan
For the Recovery (Refund) Period October 1, 2017 through September 30, 2018

(1)	Actual FY 2017 O&M Revenue Requirement	$9,466,647
(2)	O&M Revenue Billed	$9,577,345
(3)	Total Over Recovery for FY 2017	$110,698
(4)	Remaining Over For FY 2015	$126
(5)	Total Over Recovery	$110,823
(6)	Forecasted kWhs - October 1, 2017 through September 30, 2018	7,337,969,020
(7)	Proposed O&M Reconciling Factor (Credit) per kWh	($0.00001)

(1) per Attachment AM-1, Page 1, Line (4)
(2) per Page 2
(3) Line (2) - Line (1)
(4) per page 3 Line (4)
(5) Line (3) + Line (4)
(6) per Company forecast
(7) [Line (5) ÷ Line (6)], truncated to 5 decimal places

Fiscal Year 2017 Operations & Maintenance Reconciliation
For the Period April 1, 2016 through March 31, 2017
For the Recovery/Refund Period October 1, 2017 through September 30, 2018

O&M Factor Revenue:

	Month	O&M Revenue (a)	Prior Period Reconciliation Factor Revenue (b)	Base O&M Revenue (c)
(1)	Apr-16	$355,663	($15,601)	$371,264
	May-16	$602,474	($30,403)	$632,876
	Jun-16	$726,814	($36,676)	$763,490
	Jul-16	$840,087	($41,492)	$881,579
	Aug-16	$965,337	($47,173)	$1,012,510
	Sep-16	$905,189	($44,584)	$949,773
	Oct-16	$669,919	($74,694)	$744,613
	Nov-16	$569,596	($118,560)	$688,156
	Dec-16	$622,973	($128,330)	$751,302
	Jan-17	$694,490	($140,639)	$835,129
	Feb-17	$643,531	($131,775)	$775,306
	Mar-17	$614,496	($128,629)	$743,125
(2)	Apr-17	$354,690	($73,530)	$428,220
	Total	$8,565,260	($1,012,084)	$9,577,345

(1) Reflects kWhs consumed on and after April 1
(2) Reflects kWhs consumed prior to April 1

(a) from monthly revenue reports
(b) per page 3 and page 4
(c) Column (a) - Column (b)

Fiscal Year 2015 O&M Reconciliation of Over Recovery
For the Period April 1, 2014 through March 31, 2015
For the Recovery Period November 1, 2015 through September 30, 2016

(1)	Over Recovery	$434,885	
(2)	O&M Reconciling Factor	($0.00006)	
		Total kWhs	Total Revenue
		(a)	(b)
	Oct-15	238,302,535	$0
	Nov-15	529,942,035	($31,797)
	Dec-15	624,159,731	($37,450)
	Jan-16	627,611,762	($37,657)
	Feb-16	610,438,311	($36,626)
	Mar-16	607,462,620	($36,448)
	Apr-16	571,456,521	($34,287)
	May-16	506,712,348	($30,403)
	Jun-16	611,260,814	($36,676)
	Jul-16	691,526,304	($41,492)
	Aug-16	786,212,317	($47,173)
	Sep-16	743,066,106	($44,584)
	Oct-16	336,141,571	($20,168)
(3)	Total	7,484,292,975	($434,759)
(4)	Over Recovery		$126

(1) per RIPUC Docket No. 4473, Attachment ASC-3 Revised, page 1, line (5)
(2) per RIPUC Docket No. 4473, Attachment ASC-3 Revised, page 1, line (7)
(3) sum of kWhs & revenue
(4) Line (1) + Line (3)

(a) per Company Records
(b) Line (2) x Column (a)

Fiscal Year 2016 O&M Reconciliation of Over Recovery
For the Period April 1, 2015 through March 31, 2016
For the Recovery Period October 1, 2016 through September 30, 2017

(1)	Over Recovery	$1,753,429	
(2)	O&M Reconciling Factor	($0.00022)	
		Total kWhs	Total Revenue
		(a)	(b)
	Oct-16	247,843,091	($54,525)
	Nov-16	538,909,651	($118,560)
	Dec-16	583,316,761	($128,330)
	Jan-17	639,269,015	($140,639)
	Feb-17	598,976,060	($131,775)
	Mar-17	584,677,659	($128,629)
	Apr-17	579,955,496	($127,590)
	May-17	519,355,947	($114,258)
	Jun-17	592,583,630	($130,368)
	Jul-17	-	$0
	Aug-17	-	$0
	Sep-17	-	$0
	Oct-17	-	$0
(3)	Total	4,884,887,310	($1,074,675)
(4)	Over Recovery		$678,754

(1) per RIPUC Docket No. 4539, Attachment ASC-3, page 1, line (5)
(2) per RIPUC Docket No. 4539, Attachment ASC-3, page 1, line (7)
(3) sum of kWhs & revenue
(4) Line (1) + Line (3)

(a) per Company Records
(b) Line (2) x Column (a)

Attachment ASC-4

Attachment ASC-4

Typical Bill Analysis

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to A-16 Rate Customers

Monthly	Present Rates				Proposed Rates				Increase (Decrease)								Percentage
									$				% of Total Bill				
kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	of Customers
150	$20.53	$9.34	$1.24	$31.11	$20.36	$9.34	$1.24	$30.94	($0.17)	$0.00	$0.00	($0.17)	-0.5%	0.0%	0.0%	-0.5%	13.7%
300	$35.03	$18.68	$2.24	$55.95	$34.69	$18.68	$2.22	$55.59	($0.34)	$0.00	($0.02)	($0.36)	-0.6%	0.0%	0.0%	-0.6%	17.5%
400	$44.69	$24.91	$2.90	$72.50	$44.24	$24.91	$2.88	$72.03	($0.45)	$0.00	($0.02)	($0.47)	-0.6%	0.0%	0.0%	-0.6%	11.8%
500	$54.36	$31.14	$3.56	$89.06	$53.80	$31.14	$3.54	$88.48	($0.56)	$0.00	($0.02)	($0.58)	-0.6%	0.0%	0.0%	-0.7%	10.8%
600	$64.03	$37.37	$4.23	$105.63	$63.35	$37.37	$4.20	$104.92	($0.68)	$0.00	($0.03)	($0.71)	-0.6%	0.0%	0.0%	-0.7%	9.4%
700	$73.69	$43.60	$4.89	$122.18	$72.90	$43.60	$4.85	$121.35	($0.79)	$0.00	($0.04)	($0.83)	-0.6%	0.0%	0.0%	-0.7%	7.7%
1,200	$122.02	$74.74	$8.20	$204.96	$120.67	$74.74	$8.14	$203.55	($1.35)	$0.00	($0.06)	($1.41)	-0.7%	0.0%	0.0%	-0.7%	15.0%
2,000	$199.35	$124.56	$13.50	$337.41	$197.09	$124.56	$13.40	$335.05	($2.26)	$0.00	($0.10)	($2.36)	-0.7%	0.0%	0.0%	-0.7%	14.1%

		Present Rates		Proposed Rates	
Customer Charge		$5.00		$5.00	
RE Growth Factor		$0.22		$0.22	
LIHEAP Charge		$0.81		$0.81	
Transmission Energy Charge	kWh x	$0.03179		$0.03179	
Distribution Energy Charge	kWh x	$0.04589	(1)	$0.04476	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06228		$0.06228	

Note (1): includes the current CapEx Reconciliation Factor of (0.001¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.135¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to A-60 Rate Customers

	Present Rates				Proposed Rates				Increase (Decrease)								
									$				% of Total Bill				
Monthly kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Percentage of Customers
150	$13.51	$9.34	$0.95	$23.80	$13.34	$9.34	$0.95	$23.63	($0.17)	$0.00	$0.00	($0.17)	-0.7%	0.0%	0.0%	-0.7%	13.7%
300	$25.99	$18.68	$1.86	$46.53	$25.65	$18.68	$1.85	$46.18	($0.34)	$0.00	($0.01)	($0.35)	-0.7%	0.0%	0.0%	-0.8%	17.5%
400	$34.31	$24.91	$2.47	$61.69	$33.85	$24.91	$2.45	$61.21	($0.46)	$0.00	($0.02)	($0.48)	-0.7%	0.0%	0.0%	-0.8%	11.8%
500	$42.63	$31.14	$3.07	$76.84	$42.06	$31.14	$3.05	$76.25	($0.57)	$0.00	($0.02)	($0.59)	-0.7%	0.0%	0.0%	-0.8%	10.8%
600	$50.94	$37.37	$3.68	$91.99	$50.27	$37.37	$3.65	$91.29	($0.67)	$0.00	($0.03)	($0.70)	-0.7%	0.0%	0.0%	-0.8%	9.4%
700	$59.26	$43.60	$4.29	$107.15	$58.47	$43.60	$4.25	$106.32	($0.79)	$0.00	($0.04)	($0.83)	-0.7%	0.0%	0.0%	-0.8%	7.7%
1,200	$100.86	$74.74	$7.32	$182.92	$99.50	$74.74	$7.26	$181.50	($1.36)	$0.00	($0.06)	($1.42)	-0.7%	0.0%	0.0%	-0.8%	15.0%
2,000	$167.41	$124.56	$12.17	$304.14	$165.15	$124.56	$12.07	$301.78	($2.26)	$0.00	($0.10)	($2.36)	-0.7%	0.0%	0.0%	-0.8%	14.1%

		Present Rates		Proposed Rates	
Customer Charge		$0.00		$0.00	
RE Growth Factor		$0.22		$0.22	
LIHEAP Charge		$0.81		$0.81	
Transmission Energy Charge	kWh x	$0.03179		$0.03179	
Distribution Energy Charge	kWh x	$0.03242		$0.03129	
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06228	(1)	$0.06228	(2)

Note (1): includes the current CapEx Reconciliation Factor of (0.001¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.135¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to C-06 Rate Customers

	Present Rates				Proposed Rates				Increase (Decrease)								
									$				% of Total Bill				
Monthly kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Percentage of Customers
250	$33.41	$15.39	$2.03	$50.83	$33.17	$15.39	$2.02	$50.58	($0.24)	$0.00	($0.01)	($0.25)	-0.5%	0.0%	0.0%	-0.5%	35.2%
500	$55.66	$30.78	$3.60	$90.04	$55.18	$30.78	$3.58	$89.54	($0.48)	$0.00	($0.02)	($0.50)	-0.5%	0.0%	0.0%	-0.6%	17.0%
1,000	$100.15	$61.56	$6.74	$168.45	$99.20	$61.56	$6.70	$167.46	($0.95)	$0.00	($0.04)	($0.99)	-0.6%	0.0%	0.0%	-0.6%	19.0%
1,500	$144.65	$92.34	$9.87	$246.86	$143.22	$92.34	$9.82	$245.38	($1.43)	$0.00	($0.05)	($1.48)	-0.6%	0.0%	0.0%	-0.6%	9.8%
2,000	$189.14	$123.12	$13.01	$325.27	$187.24	$123.12	$12.93	$323.29	($1.90)	$0.00	($0.08)	($1.98)	-0.6%	0.0%	0.0%	-0.6%	19.1%

		Present Rates		Proposed Rates	
Customer Charge		$10.00		$10.00	
RE Growth Factor		$0.35		$0.35	
LIHEAP Charge		$0.81		$0.81	
Transmission Energy Charge	kWh x	$0.02838		$0.02838	
Distribution Energy Charge	kWh x	$0.04163	(1)	$0.04068	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.003¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.119¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 3 of 18

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 4 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-02 Rate Customers

Hours Use: 200

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	4000	$443.86	$246.24	$28.75	$718.85	$441.02	$246.24	$28.64	$715.90	($2.84)	$0.00	($0.11)	($2.95)	-0.4%	0.0%	0.0%	-0.4%
50	10000	$983.68	$615.60	$66.64	$1,665.92	$976.58	$615.60	$66.34	$1,658.52	($7.10)	$0.00	($0.30)	($7.40)	-0.4%	0.0%	0.0%	-0.4%
100	20000	$1,883.38	$1,231.20	$129.77	$3,244.35	$1,869.18	$1,231.20	$129.18	$3,229.56	($14.20)	$0.00	($0.59)	($14.79)	-0.4%	0.0%	0.0%	-0.5%
150	30000	$2,783.08	$1,846.80	$192.91	$4,822.79	$2,761.78	$1,846.80	$192.02	$4,800.60	($21.30)	$0.00	($0.89)	($22.19)	-0.4%	0.0%	0.0%	-0.5%

		Present Rates		Proposed Rates	
Customer Charge		$135.00		$135.00	
RE Growth Factor		$3.37		$3.37	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.37		$4.37	
Transmission Energy Charge	kWh x	$0.01095		$0.01095	
Distribution Demand Charge-xcs 10 kW	kW x	$5.52		$5.52	
Distribution Energy Charge	kWh x	$0.01059	(1)	$0.00988	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.006¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.098¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-02 Rate Customers

Hours Use: 300

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	6000	$524.90	$369.36	$37.26	$931.52	$520.64	$369.36	$37.08	$927.08	($4.26)	$0.00	($0.18)	($4.44)	-0.5%	0.0%	0.0%	-0.5%
50	15000	$1,186.28	$923.40	$87.90	$2,197.58	$1,175.63	$923.40	$87.46	$2,186.49	($10.65)	$0.00	($0.44)	($11.09)	-0.5%	0.0%	0.0%	-0.5%
100	30000	$2,288.58	$1,846.80	$172.31	$4,307.69	$2,267.28	$1,846.80	$171.42	$4,285.50	($21.30)	$0.00	($0.89)	($22.19)	-0.5%	0.0%	0.0%	-0.5%
150	45000	$3,390.88	$2,770.20	$256.71	$6,417.79	$3,358.93	$2,770.20	$255.38	$6,384.51	($31.95)	$0.00	($1.33)	($33.28)	-0.5%	0.0%	0.0%	-0.5%

		Present Rates		Proposed Rates	
Customer Charge		$135.00		$135.00	
RE Growth Factor		$3.37		$3.37	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.37		$4.37	
Transmission Energy Charge	kWh x	$0.01095		$0.01095	
Distribution Demand Charge-xcs 10 kW	kW x	$5.52		$5.52	
Distribution Energy Charge	kWh x	$0.01059	(1)	$0.00988	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.006¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.098¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 5 of 18

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 6 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-02 Rate Customers

Hours Use: 400

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	8000	$605.94	$492.48	$45.77	$1,144.19	$600.26	$492.48	$45.53	$1,138.27	($5.68)	$0.00	($0.24)	($5.92)	-0.5%	0.0%	0.0%	-0.5%
50	20000	$1,388.88	$1,231.20	$109.17	$2,729.25	$1,374.68	$1,231.20	$108.58	$2,714.46	($14.20)	$0.00	($0.59)	($14.79)	-0.5%	0.0%	0.0%	-0.5%
100	40000	$2,693.78	$2,462.40	$214.84	$5,371.02	$2,665.38	$2,462.40	$213.66	$5,341.44	($28.40)	$0.00	($1.18)	($29.58)	-0.5%	0.0%	0.0%	-0.6%
150	60000	$3,998.68	$3,693.60	$320.51	$8,012.79	$3,956.08	$3,693.60	$318.74	$7,968.42	($42.60)	$0.00	($1.77)	($44.37)	-0.5%	0.0%	0.0%	-0.6%

		Present Rates		Proposed Rates	
Customer Charge		$135.00		$135.00	
RE Growth Factor		$3.37		$3.37	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.37		$4.37	
Transmission Energy Charge	kWh x	$0.01095		$0.01095	
Distribution Demand Charge-xcs 10 kW	kW x	$5.52		$5.52	
Distribution Energy Charge	kWh x	$0.01059	(1)	$0.00988	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.006¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.098¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-02 Rate Customers

Hours Use: 500

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	10000	$686.98	$615.60	$54.27	$1,356.85	$679.88	$615.60	$53.98	$1,349.46	($7.10)	$0.00	($0.29)	($7.39)	-0.5%	0.0%	0.0%	-0.5%
50	25000	$1,591.48	$1,539.00	$130.44	$3,260.92	$1,573.73	$1,539.00	$129.70	$3,242.43	($17.75)	$0.00	($0.74)	($18.49)	-0.5%	0.0%	0.0%	-0.6%
100	50000	$3,098.98	$3,078.00	$257.37	$6,434.35	$3,063.48	$3,078.00	$255.90	$6,397.38	($35.50)	$0.00	($1.47)	($36.97)	-0.6%	0.0%	0.0%	-0.6%
150	75000	$4,606.48	$4,617.00	$384.31	$9,607.79	$4,553.23	$4,617.00	$382.09	$9,552.32	($53.25)	$0.00	($2.22)	($55.47)	-0.6%	0.0%	0.0%	-0.6%

		Present Rates		Proposed Rates	
Customer Charge		$135.00		$135.00	
RE Growth Factor		$3.37		$3.37	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.37		$4.37	
Transmission Energy Charge	kWh x	$0.01095		$0.01095	
Distribution Demand Charge-xcs 10 kW	kW x	$5.52		$5.52	
Distribution Energy Charge	kWh x	$0.01059	(1)	$0.00988	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.006¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.098¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 7 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-02 Rate Customers

Hours Use: 600

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	12000	$768.02	$738.72	$62.78	$1,569.52	$759.50	$738.72	$62.43	$1,560.65	($8.52)	$0.00	($0.35)	($8.87)	-0.5%	0.0%	0.0%	-0.6%
50	30000	$1,794.08	$1,846.80	$151.70	$3,792.58	$1,772.78	$1,846.80	$150.82	$3,770.40	($21.30)	$0.00	($0.88)	($22.18)	-0.6%	0.0%	0.0%	-0.6%
100	60000	$3,504.18	$3,693.60	$299.91	$7,497.69	$3,461.58	$3,693.60	$298.13	$7,453.31	($42.60)	$0.00	($1.78)	($44.38)	-0.6%	0.0%	0.0%	-0.6%
150	90000	$5,214.28	$5,540.40	$448.11	$11,202.79	$5,150.38	$5,540.40	$445.45	$11,136.23	($63.90)	$0.00	($2.66)	($66.56)	-0.6%	0.0%	0.0%	-0.6%

		Present Rates		Proposed Rates	
Customer Charge		$135.00		$135.00	
RE Growth Factor		$3.37		$3.37	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.37		$4.37	
Transmission Energy Charge	kWh x	$0.01095		$0.01095	
Distribution Demand Charge-xcs 10 kW	kW x	$5.52		$5.52	
Distribution Energy Charge	kWh x	$0.01059	(1)	$0.00988	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06156		$0.06156	

Note (1): includes the current CapEx Reconciliation Factor of (0.006¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.098¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 8 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-32 Rate Customers

Hours Use: 200

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	40,000	$3,434.70	$2,517.20	$248.00	$6,199.90	$3,427.10	$2,517.20	$247.68	$6,191.98	($7.60)	$0.00	($0.32)	($7.92)	-0.1%	0.0%	0.0%	-0.1%
750	150,000	$12,967.30	$9,439.50	$933.62	$23,340.42	$12,938.80	$9,439.50	$932.43	$23,310.73	($28.50)	$0.00	($1.19)	($29.69)	-0.1%	0.0%	0.0%	-0.1%
1,000	200,000	$17,300.30	$12,586.00	$1,245.26	$31,131.56	$17,262.30	$12,586.00	$1,243.68	$31,091.98	($38.00)	$0.00	($1.58)	($39.58)	-0.1%	0.0%	0.0%	-0.1%
1,500	300,000	$25,966.30	$18,879.00	$1,868.55	$46,713.85	$25,909.30	$18,879.00	$1,866.18	$46,654.48	($57.00)	$0.00	($2.37)	($59.37)	-0.1%	0.0%	0.0%	-0.1%
2,500	500,000	$43,298.30	$31,465.00	$3,115.14	$77,878.44	$43,203.30	$31,465.00	$3,111.18	$77,779.48	($95.00)	$0.00	($3.96)	($98.96)	-0.1%	0.0%	0.0%	-0.1%

		Present Rates		Proposed Rates	
Customer Charge		$825.00		$825.00	
RE Growth Factor		$24.49		$24.49	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.69		$4.69	
Transmission Energy Charge	kWh x	$0.01123		$0.01123	
Distribution Demand Charge-xcs 10 kW	kW x	$4.41		$4.41	
Distribution Energy Charge	kWh x	$0.01095	(1)	$0.01076	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of (0.010¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.050¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 9 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-32 Rate Customers

Hours Use: 300

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	60,000	$4,257.90	$3,775.80	$334.74	$8,368.44	$4,246.50	$3,775.80	$334.26	$8,356.56	($11.40)	$0.00	($0.48)	($11.88)	-0.1%	0.0%	0.0%	-0.1%
750	225,000	$16,054.30	$14,159.25	$1,258.90	$31,472.45	$16,011.55	$14,159.25	$1,257.12	$31,427.92	($42.75)	$0.00	($1.78)	($44.53)	-0.1%	0.0%	0.0%	-0.1%
1,000	300,000	$21,416.30	$18,879.00	$1,678.97	$41,974.27	$21,359.30	$18,879.00	$1,676.60	$41,914.90	($57.00)	$0.00	($2.37)	($59.37)	-0.1%	0.0%	0.0%	-0.1%
1,500	450,000	$32,140.30	$28,318.50	$2,519.12	$62,977.92	$32,054.80	$28,318.50	$2,515.55	$62,888.85	($85.50)	$0.00	($3.57)	($89.07)	-0.1%	0.0%	0.0%	-0.1%
2,500	750,000	$53,588.30	$47,197.50	$4,199.41	$104,985.21	$53,445.80	$47,197.50	$4,193.47	$104,836.77	($142.50)	$0.00	($5.94)	($148.44)	-0.1%	0.0%	0.0%	-0.1%

		Present Rates		Proposed Rates	
Customer Charge		$825.00		$825.00	
RE Growth Factor		$24.49		$24.49	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.69		$4.69	
Transmission Energy Charge	kWh x	$0.01123		$0.01123	
Distribution Demand Charge-xcs 10 kW	kW x	$4.41		$4.41	
Distribution Energy Charge	kWh x	$0.01095	(1)	$0.01076	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of (0.010¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.050¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastructure, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 10 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-32 Rate Customers

Hours Use: 400

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	$5,081.10	$5,034.40	$421.48	$10,536.98	$5,065.90	$5,034.40	$420.85	$10,521.15	($15.20)	$0.00	($0.63)	($15.83)	-0.1%	0.0%	0.0%	-0.2%
750	300,000	$19,141.30	$18,879.00	$1,584.18	$39,604.48	$19,084.30	$18,879.00	$1,581.80	$39,545.10	($57.00)	$0.00	($2.38)	($59.38)	-0.1%	0.0%	0.0%	-0.1%
1,000	400,000	$25,532.30	$25,172.00	$2,112.68	$52,816.98	$25,456.30	$25,172.00	$2,109.51	$52,737.81	($76.00)	$0.00	($3.17)	($79.17)	-0.1%	0.0%	0.0%	-0.1%
1,500	600,000	$38,314.30	$37,758.00	$3,169.68	$79,241.98	$38,200.30	$37,758.00	$3,164.93	$79,123.23	($114.00)	$0.00	($4.75)	($118.75)	-0.1%	0.0%	0.0%	-0.1%
2,500	1,000,000	$63,878.30	$62,930.00	$5,283.68	$132,091.98	$63,688.30	$62,930.00	$5,275.76	$131,894.06	($190.00)	$0.00	($7.92)	($197.92)	-0.1%	0.0%	0.0%	-0.1%

		Present Rates		Proposed Rates	
Customer Charge		$825.00		$825.00	
RE Growth Factor		$24.49		$24.49	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.69		$4.69	
Transmission Energy Charge	kWh x	$0.01123		$0.01123	
Distribution Demand Charge-xcs 10 kW	kW x	$4.41		$4.41	
Distribution Energy Charge	kWh x	$0.01095	(1)	$0.01076	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of (0.010¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.050¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 11 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-32 Rate Customers

Hours Use: 500

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease) $				Increase (Decrease) % of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	100,000	$5,904.30	$6,293.00	$508.22	$12,705.52	$5,885.30	$6,293.00	$507.43	$12,685.73	($19.00)	$0.00	($0.79)	($19.79)	-0.1%	0.0%	0.0%	-0.2%
750	375,000	$22,228.30	$23,598.75	$1,909.46	$47,736.51	$22,157.05	$23,598.75	$1,906.49	$47,662.29	($71.25)	$0.00	($2.97)	($74.22)	-0.1%	0.0%	0.0%	-0.2%
1,000	500,000	$29,648.30	$31,465.00	$2,546.39	$63,659.69	$29,553.30	$31,465.00	$2,542.43	$63,560.73	($95.00)	$0.00	($3.96)	($98.96)	-0.1%	0.0%	0.0%	-0.2%
1,500	750,000	$44,488.30	$47,197.50	$3,820.24	$95,506.04	$44,345.80	$47,197.50	$3,814.30	$95,357.60	($142.50)	$0.00	($5.94)	($148.44)	-0.1%	0.0%	0.0%	-0.2%
2,500	1,250,000	$74,168.30	$78,662.50	$6,367.95	$159,198.75	$73,930.80	$78,662.50	$6,358.05	$158,951.35	($237.50)	$0.00	($9.90)	($247.40)	-0.1%	0.0%	0.0%	-0.2%

		Present Rates		Proposed Rates	
Customer Charge		$825.00		$825.00	
RE Growth Factor		$24.49		$24.49	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.69		$4.69	
Transmission Energy Charge	kWh x	$0.01123		$0.01123	
Distribution Demand Charge-xcs 10 kW	kW x	$4.41		$4.41	
Distribution Energy Charge	kWh x	$0.01095	(1)	$0.01076	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of (0.010¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.050¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 12 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-32 Rate Customers

Hours Use: 600

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	120,000	$6,727.50	$7,551.60	$594.96	$14,874.06	$6,704.70	$7,551.60	$594.01	$14,850.31	($22.80)	$0.00	($0.95)	($23.75)	-0.2%	0.0%	0.0%	-0.2%
750	450,000	$25,315.30	$28,318.50	$2,234.74	$55,868.54	$25,229.80	$28,318.50	$2,231.18	$55,779.48	($85.50)	$0.00	($3.56)	($89.06)	-0.2%	0.0%	0.0%	-0.2%
1,000	600,000	$33,764.30	$37,758.00	$2,980.10	$74,502.40	$33,650.30	$37,758.00	$2,975.35	$74,383.65	($114.00)	$0.00	($4.75)	($118.75)	-0.2%	0.0%	0.0%	-0.2%
1,500	900,000	$50,662.30	$56,637.00	$4,470.80	$111,770.10	$50,491.30	$56,637.00	$4,463.68	$111,591.98	($171.00)	$0.00	($7.12)	($178.12)	-0.2%	0.0%	0.0%	-0.2%
2,500	1,500,000	$84,458.30	$94,395.00	$7,452.22	$186,305.52	$84,173.30	$94,395.00	$7,440.35	$186,008.65	($285.00)	$0.00	($11.87)	($296.87)	-0.2%	0.0%	0.0%	-0.2%

		Present Rates		Proposed Rates	
Customer Charge		$825.00		$825.00	
RE Growth Factor		$24.49		$24.49	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$4.69		$4.69	
Transmission Energy Charge	kWh x	$0.01123		$0.01123	
Distribution Demand Charge-xcs 10 kW	kW x	$4.41		$4.41	
Distribution Energy Charge	kWh x	$0.01095	(1)	$0.01076	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of (0.010¢)/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.050¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 13 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-62 Rate Customers

Hours Use: 200

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
3,000	600,000	$62,900.11	$37,758.00	$4,194.09	$104,852.20	$62,720.11	$37,758.00	$4,186.59	$104,664.70	($180.00)	$0.00	($7.50)	($187.50)	-0.2%	0.0%	0.0%	-0.2%
5,000	1,000,000	$93,140.11	$62,930.00	$6,502.92	$162,573.03	$92,840.11	$62,930.00	$6,490.42	$162,260.53	($300.00)	$0.00	($12.50)	($312.50)	-0.2%	0.0%	0.0%	-0.2%
7,500	1,500,000	$130,940.11	$94,395.00	$9,388.96	$234,724.07	$130,490.11	$94,395.00	$9,370.21	$234,255.32	($450.00)	$0.00	($18.75)	($468.75)	-0.2%	0.0%	0.0%	-0.2%
10,000	2,000,000	$168,740.11	$125,860.00	$12,275.00	$306,875.11	$168,140.11	$125,860.00	$12,250.00	$306,250.11	($600.00)	$0.00	($25.00)	($625.00)	-0.2%	0.0%	0.0%	-0.2%
20,000	4,000,000	$319,940.11	$251,720.00	$23,819.17	$595,479.28	$318,740.11	$251,720.00	$23,769.17	$594,229.28	($1,200.00)	$0.00	($50.00)	($1,250.00)	-0.2%	0.0%	0.0%	-0.2%

		Present Rates		Proposed Rates	
Customer Charge		$17,000.00		$17,000.00	
RE Growth Factor		$539.30		$539.30	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$3.40		$3.40	
Transmission Energy Charge	kWh x	$0.01524		$0.01524	
Distribution Demand Charge-xcs 10 kW	kW x	$3.90		$3.90	
Distribution Energy Charge	kWh x	$0.00488	(1)	$0.00458	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of 0.013¢/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.038¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 14 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-62 Rate Customers

Hours Use: 300

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
3,000	900,000	$74,630.11	$56,637.00	$5,469.46	$136,736.57	$74,360.11	$56,637.00	$5,458.21	$136,455.32	($270.00)	$0.00	($11.25)	($281.25)	-0.2%	0.0%	0.0%	-0.2%
5,000	1,500,000	$112,690.11	$94,395.00	$8,628.55	$215,713.66	$112,240.11	$94,395.00	$8,609.80	$215,244.91	($450.00)	$0.00	($18.75)	($468.75)	-0.2%	0.0%	0.0%	-0.2%
7,500	2,250,000	$160,265.11	$141,592.50	$12,577.40	$314,435.01	$159,590.11	$141,592.50	$12,549.28	$313,731.89	($675.00)	$0.00	($28.12)	($703.12)	-0.2%	0.0%	0.0%	-0.2%
10,000	3,000,000	$207,840.11	$188,790.00	$16,526.25	$413,156.36	$206,940.11	$188,790.00	$16,488.75	$412,218.86	($900.00)	$0.00	($37.50)	($937.50)	-0.2%	0.0%	0.0%	-0.2%
20,000	6,000,000	$398,140.11	$377,580.00	$32,321.67	$808,041.78	$396,340.11	$377,580.00	$32,246.67	$806,166.78	($1,800.00)	$0.00	($75.00)	($1,875.00)	-0.2%	0.0%	0.0%	-0.2%

		Present Rates		Proposed Rates	
Customer Charge		$17,000.00		$17,000.00	
RE Growth Factor		$539.30		$539.30	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$3.40		$3.40	
Transmission Energy Charge	kWh x	$0.01524		$0.01524	
Distribution Demand Charge-xcs 10 kW	kW x	$3.90		$3.90	
Distribution Energy Charge	kWh x	$0.00488	(1)	$0.00458	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of 0.013¢/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.038¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 15 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-62 Rate Customers

Hours Use: 400

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
3,000	1,200,000	$86,360.11	$75,516.00	$6,744.84	$168,620.95	$86,000.11	$75,516.00	$6,729.84	$168,245.95	($360.00)	$0.00	($15.00)	($375.00)	-0.2%	0.0%	0.0%	-0.2%
5,000	2,000,000	$132,240.11	$125,860.00	$10,754.17	$268,854.28	$131,640.11	$125,860.00	$10,729.17	$268,229.28	($600.00)	$0.00	($25.00)	($625.00)	-0.2%	0.0%	0.0%	-0.2%
7,500	3,000,000	$189,590.11	$188,790.00	$15,765.84	$394,145.95	$188,690.11	$188,790.00	$15,728.34	$393,208.45	($900.00)	$0.00	($37.50)	($937.50)	-0.2%	0.0%	0.0%	-0.2%
10,000	4,000,000	$246,940.11	$251,720.00	$20,777.50	$519,437.61	$245,740.11	$251,720.00	$20,727.50	$518,187.61	($1,200.00)	$0.00	($50.00)	($1,250.00)	-0.2%	0.0%	0.0%	-0.2%
20,000	8,000,000	$476,340.11	$503,440.00	$40,824.17	$1,020,604.28	$473,940.11	$503,440.00	$40,724.17	$1,018,104.28	($2,400.00)	$0.00	($100.00)	($2,500.00)	-0.2%	0.0%	0.0%	-0.2%

		Present Rates		Proposed Rates	
Customer Charge		$17,000.00		$17,000.00	
RE Growth Factor		$539.30		$539.30	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$3.40		$3.40	
Transmission Energy Charge	kWh x	$0.01524		$0.01524	
Distribution Demand Charge-xcs 10 kW	kW x	$3.90		$3.90	
Distribution Energy Charge	kWh x	$0.00488	(1)	$0.00458	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of 0.013¢/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.038¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 16 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-62 Rate Customers

Hours Use: 500

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
3,000	1,500,000	$98,090.11	$94,395.00	$8,020.21	$200,505.32	$97,640.11	$94,395.00	$8,001.46	$200,036.57	($450.00)	$0.00	($18.75)	($468.75)	-0.2%	0.0%	0.0%	-0.2%
5,000	2,500,000	$151,790.11	$157,325.00	$12,879.80	$321,994.91	$151,040.11	$157,325.00	$12,848.55	$321,213.66	($750.00)	$0.00	($31.25)	($781.25)	-0.2%	0.0%	0.0%	-0.2%
7,500	3,750,000	$218,915.11	$235,987.50	$18,954.28	$473,856.89	$217,790.11	$235,987.50	$18,907.40	$472,685.01	($1,125.00)	$0.00	($46.88)	($1,171.88)	-0.2%	0.0%	0.0%	-0.2%
10,000	5,000,000	$286,040.11	$314,650.00	$25,028.75	$625,718.86	$284,540.11	$314,650.00	$24,966.25	$624,156.36	($1,500.00)	$0.00	($62.50)	($1,562.50)	-0.2%	0.0%	0.0%	-0.2%
20,000	10,000,000	$554,540.11	$629,300.00	$49,326.67	$1,233,166.78	$551,540.11	$629,300.00	$49,201.67	$1,230,041.78	($3,000.00)	$0.00	($125.00)	($3,125.00)	-0.2%	0.0%	0.0%	-0.3%

		Present Rates		Proposed Rates	
Customer Charge		$17,000.00		$17,000.00	
RE Growth Factor		$539.30		$539.30	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$3.40		$3.40	
Transmission Energy Charge	kWh x	$0.01524		$0.01524	
Distribution Demand Charge-xcs 10 kW	kW x	$3.90		$3.90	
Distribution Energy Charge	kWh x	$0.00488	(1)	$0.00458	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of 0.013¢/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.038¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 17 of 18

Calculation of Monthly Typical Bill
Total Bill Impact of Proposed
Rates Applicable to G-62 Rate Customers

Hours Use: 600

Monthly Power		Present Rates				Proposed Rates				Increase (Decrease)							
										$				% of Total Bill			
kW	kWh	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
3,000	1,800,000	$109,820.11	$113,274.00	$9,295.59	$232,389.70	$109,280.11	$113,274.00	$9,273.09	$231,827.20	($540.00)	$0.00	($22.50)	($562.50)	-0.2%	0.0%	0.0%	-0.2%
5,000	3,000,000	$171,340.11	$188,790.00	$15,005.42	$375,135.53	$170,440.11	$188,790.00	$14,967.92	$374,198.03	($900.00)	$0.00	($37.50)	($937.50)	-0.2%	0.0%	0.0%	-0.2%
7,500	4,500,000	$248,240.11	$283,185.00	$22,142.71	$553,567.82	$246,890.11	$283,185.00	$22,086.46	$552,161.57	($1,350.00)	$0.00	($56.25)	($1,406.25)	-0.2%	0.0%	0.0%	-0.3%
10,000	6,000,000	$325,140.11	$377,580.00	$29,280.00	$732,000.11	$323,340.11	$377,580.00	$29,205.00	$730,125.11	($1,800.00)	$0.00	($75.00)	($1,875.00)	-0.2%	0.0%	0.0%	-0.3%
20,000	12,000,000	$632,740.11	$755,160.00	$57,829.17	$1,445,729.28	$629,140.11	$755,160.00	$57,679.17	$1,441,979.28	($3,600.00)	$0.00	($150.00)	($3,750.00)	-0.2%	0.0%	0.0%	-0.3%

		Present Rates		Proposed Rates	
Customer Charge		$17,000.00		$17,000.00	
RE Growth Factor		$539.30		$539.30	
LIHEAP Charge		$0.81		$0.81	
Transmission Demand Charge	kW x	$3.40		$3.40	
Transmission Energy Charge	kWh x	$0.01524		$0.01524	
Distribution Demand Charge-xcs 10 kW	kW x	$3.90		$3.90	
Distribution Energy Charge	kWh x	$0.00488	(1)	$0.00458	(2)
Transition Energy Charge	kWh x	$0.00057		$0.00057	
Energy Efficiency Program Charge	kWh x	$0.01154		$0.01154	
Renewable Energy Distribution Charge	kWh x	$0.00687		$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	$0.06293		$0.06293	

Note (1): includes the current CapEx Reconciliation Factor of 0.013¢/kWh and the current O&M Reconciliation Factor of (0.022¢)/kWh

Note (2): includes the proposed CapEx Reconciliation Factor of (0.038¢)/kWh and the proposed O&M Reconciliation Factor of (0.001¢)/kWh

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4592
FY 2017 Electric Infrastucture, Safety,
and Reliability Plan Annual Reconciliation Filing
Attachment ASC-4
Page 18 of 18